

April 15, 2015

The Honorable Mayor Ed Braddy and City Commission City of Gainesville, Florida c/o Carlos Hold, City Auditor PO Box 490-17 Gainesville, FL 32627-0490

#### Re: Independent Investigative Review of the Gainesville Regional Utilities (GRU) – Request for Proposal (RFP) No. CAUD140037-DH

Dear Mayor Braddy:

Enclosed please find the report summarizing the results of the Independent Investigative Review of the Gainesville Regional Utilities (GRU) conducted by Navigant Consulting (PI) LLC.

Sincerely,

Todd K. Lester Navigant Consulting (PI) LLC

Enclosure Kathy Viehe, Gainesville Regional Utilities

# INDEPENDENT INVESTIGATIVE REVIEW OF THE GAINESVILLE REGIONAL UTILITIES (GRU)



Gainesville Regional Utiities

**Prepared for:** 



April 15, 2015

Prepared by:

Navigant Consulting (PI) LLC 98 San Jacinto Blvd., Suite 900 Austin, TX 78701

www.navigantconsulting.com

Todd K. Lester James Peterson Dan Stathos

#### Introduction

Navigant Consulting (PI), LLC, a subsidiary of Navigant Consulting, Inc. (collectively "Navigant"), submits this report entitled *Independent Investigative Review of the Gainesville Regional Utilities* ("Report") to the elected Mayor and City Commission for the City of Gainesville, Florida ("City Commission").

Navigant was retained by the City Commission to perform an independent assessment and evaluation of the Gainesville Regional Utilities ("GRU") and its dealings with Nacogdoches Power, LLP (and its assumed ownership interest by American Renewables) and the long-term Power Purchase Agreement ("PPA") entered into between the City of Gainesville, Florida ("City") and the Gainesville Renewable Energy Center ("GREC"). Given outstanding questions and concerns regarding the terms of the PPA and the events surrounding the negotiations and decision-making leading to the execution of the PPA, as well as concerns regarding the future operational and financial performance of GRU in relation to the PPA, the City Commission believed an independent assessment and evaluation were warranted.

In accordance with the scope of work and terms of Navigant's engagement, Navigant conducted an independent investigation and review of the circumstances surrounding the development of the Request for Proposal ("RFP") for a biomass-powered generation facility issued in 2007, the selection of the three top ranked indicative proposals in January 2008, the selection of the top ranked binding proposal in April 2008, and the negotiation of the PPA that was executed in 2009. Navigant's efforts also included an evaluation and assessment of subsequent changes and amendments to the PPA prior to the commercial operation of the GREC facility in 2013. This Report presents the work performed in connection with the requested evaluation and summarizes the observations, findings and recommendations, where applicable.

Navigant has made its best effort, given the City Commission's scope and objectives, and the available time and resources, to conduct an impartial, independent and extensive evaluation into various issues, questions and concerns raised regarding the GREC PPA. The scope of our efforts focused on the decision-making processes and relevant transactions occurring from the time the City Commission authorized GRU and City staff to issue an RFP to solicit biomass-fuel electrical generation in October 2007 until November 15, 2013 when the former GRU General Manager (Mr. Robert Hunzinger) left the employ of GRU.<sup>1</sup> Our scope also included a review of the flow of financial information provided to the City Commission, especially as it relates to the "Equitable Adjustment Agreement for Change in Law." This Report explains the substance of the most significant questions and issues evaluated including:

- Observations from our review of relevant agreements, documents, financial records, memos, emails and other materials associated with the GREC PPA including subsequent agreements;
- Activities and decisions involving the GREC PPA and subsequent agreements and changes, including the "Equitable Adjustment Agreement for Change of Law," with a focus on policy, legal and administrative standards and compliance;
- A determination as to whether any financial recoveries may be available for GRU; and

<sup>&</sup>lt;sup>1</sup> Request for Proposal No. CAUD140037-DH was issued by the City on April 10, 2004

• A review of GRU's policies, procedures and practices with respect to expenditure contracting and other compliance issues that may include recommendations to strengthen the working relationship between GRU and the City Commission and to improve future financial oversight.

As requested, we have conducted our investigative review in a manner consistent with sound forensic investigative practices to the extent you should decide to pursue other actions, if any, against any party to the GREC PPA or individuals and entities involved with the negotiation, execution and implementation of the PPA and subsequent agreements.

While the scope of our efforts has been broad, we did not conduct an exhaustive evaluation into all of the concerns and questions raised regarding GRU or the various causal factors that have led to increases in GRU's electric rates, as such an evaluation would have necessitated time and resources beyond those reasonably required to address the City Commission's objectives. We were not asked, and have not attempted, to perform a detailed evaluation into the technical aspects of GRU's integration of the biomass-fueled generation into its operations, nor questions regarding the perceived or potential future benefits or costs to GRU and its customers, as such questions were beyond the scope of our efforts and this Report.

#### **Overview of Navigant Consulting**

**Navigant Consulting (NYSE: NCI)** – is an international firm of advisors and consultants with more than 3,000 professionals located in nearly 50 cities in North America, Europe and Asia, including two (2) offices in Florida (Miami and Tampa). Navigant specializes in assisting major corporations, including electric utilities, their management, Boards of Directors, and inside and outside counsel in conducting strategic consulting engagements and investigations, often involving significant challenges, operational problems, and highly-sensitive issues. Navigant is a leading management consulting firm in the energy sector and works with many of the leading electric utility and power enterprises in the country, as well as regulatory commissions and other related entities undertaking efforts to conduct assessments of operational performance, internal controls and other critical business processes, as well as matters involving cost justification, validation and reconciliation.

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#### List of Acronyms

Acronym	Term
\$/MWh	Dollars per megawatt
A&G	Administrative & General
AEO	Annual Energy Outlook (by the Energy Information Administration)
Alachua	City of Alachua
American Renewables	American Renewables, LLC
APPA	American Public Power Association
ВАСТ	Best Available Control Technology
BayCorp	BayCorp Holdings, Ltd.
СССТ	Combined Cycle Combustion Turbine
CFB	Circulating Fluidized Bed
CHP	Combined Heat and Power
City Commission	Gainesville City Commission
Commission	Florida Public Service Commission
CR3	Crystal River 3
CTG	Combustion Turbine Generator
DSM	Demand Side Management
FDEP	Florida Department of Environmental Protection
EIA	Energy Information Administration
EMI	Energy Management, Inc.
EPC	Engineering, Procurement, and Construction
FAC	Florida Administrative Code
FCR	Fixed Charge Rate
FIT	Feed-in-Tariff
FMPA	Florida Municipal Power Agency
GEAC	Gainesville Energy Advisory Committee
GREC	Gainesville Renewable Energy Center, LLC
GRU	Gainesville Regional Utilities
GSD	General Service Demand
IGCC	Integrated Gasification Combined Cycle
IRP	Integrated Resource Planning
ITC	Investment Tax Credit
kWh	Kilowatt-Hours
LCOE	Levelized Cost of Energy
MSW	Municipal Solid Waste
MW	Megawatts
MWh	Megawatt-Hour
Nacogdoches	Nacogdoches Power, LLC
NOx	Nitrogen oxides
O&M	Operations and Maintenance
PPA	Power Purchase Agreement
PPSA	Florida Electrical Power Plant Siting Act
PSD	Prevention of Significant Deterioration

PTC	Production Tax Credit
PV	Photovoltaic
REC	Renewable Energy Credit
RFI	Request for Letters of Interest
RFP	Request for Proposal
RPS	Renewable Portfolio Standard
RUC	Regional Utilities Committee
SCA	Site Certification Application
SCR	Selective Catalytic Reduction
SEC	South Energy Center
SNCR	Selective Non-Catalytic Reduction
SO <sub>2</sub>	Sulfur Dioxide
Starwood	Starwood Energy Management, Inc.
System	Electric Power Production, Transmission, and Distribution System
Tyr	Tyr Energy

#### Executive Summary

#### A. Introduction

This Executive Summary is based on the set of facts, explanations and limitations described in the report entitled *Independent Investigative Review of the Gainesville Regional Utilities (GRU)* ("Report") for the City of Gainesville ("City") prepared by Navigant Consulting (PI), LLC, a subsidiary of Navigant Consulting, Inc. (collectively "Navigant"), and should be read with the Report. Standing alone, it does not, and cannot, provide a full understanding of the facts and analysis underlying our observations, findings and recommendations. In addition, while this Executive Summary is intended to provide the relevant basis for our findings, it does not detail all of the support for our observations and findings, nor the breadth or depth of efforts undertaken by Navigant in our evaluation.

Over the years, GRU has faced varying demands on its people and infrastructure to meet the changing regulatory, technological and operational challenges of a municipal electric utility. These challenges have been evident at points in GRU's history including in its efforts to address the complex nature of integrated resource planning relative to changing operational, environmental and regulatory variables that can have a substantive impact on decision-making.

While GRU has faced significant challenges, it also has had success. GRU has continued to meet the electric reliability standards expected by its customers and is widely recognized as a leader and innovator in its efforts to focus on renewable energy and energy conservation. Over the past ten years, GRU has made significant capital investments and improvements to its systems including successfully retrofitting its primary coal generation asset with new emissions control technology, building a new operations center, and upgrading its financial management systems.

#### B. Background

On April 29, 2009, GRU executed a long-term (30-year) Power Purchase Agreement ("PPA") for a 100 MW biomass-fired power production facility to be built, owned and operated by the Gainesville Renewable Energy Center ("GREC").<sup>2</sup> The PPA was signed by James S. Gordon, as President of GREC, and Robert E. Hunzinger, as General Manager for GRU. The PPA was later approved by the Gainesville City Commission on May 7, 2009.<sup>3</sup>

The City Commission's order approving the negotiation of a long-term PPA was the result of an extensive multi-year effort that was expected to lead to important long-term benefits to GRU and the City. At the time, GRU estimated that the potential value (i.e., net present value) to the City over the 30-year term of the PPA would range from \$212 million to \$492 million, but that the value depended on "various sensitivities, such as project completion date, implementation of renewable portfolio standard

<sup>&</sup>lt;sup>2</sup> Power Purchase Agreement for the Supply of Dependable Capacity, Energy and Environmental Attributes from a Biomass-Fired Power Production Facility, by and between, Gainesville Renewable Energy Center, LLC and The City of Gainesville, Florida d/b/a Gainesville Regional Utilities, dated as of April 29, 2009

<sup>&</sup>lt;sup>3</sup> City of Gainesville, Meeting Minutes, May 07, 2009, City Commission

and/or carbon constraint legislation..."<sup>4</sup> However, from inception of the proposed biomass facility through the negotiation of the PPA and subsequent permitting processes, questions have been raised by citizens, the City's elected officials, and others regarding GREC, the PPA, and their ultimate impact on the Gainesville community and GRU's customers.

In addition, in October 2013, the existence of an Equitable Adjustment for a Change of Law to the PPA ("Equitable Adjustment"), which was executed in March 2011, was brought to the attention of the City Commission. However, the existence of the Equitable Adjustment, which is projected to result in increased costs to GRU under the PPA of approximately \$105 million over the 30-year term, had remained largely unknown to the City Commission and other City staff until that time.<sup>5</sup>

The revelation regarding the existence of the perceived unauthorized Equitable Adjustment, as well as the realization that many of the projected benefits of the biomass facility and long-term PPA seemed much less likely, raised further questions and concerns. These heightened concerns ultimately led to requests by concerned citizens for an independent assessment and evaluation of the GREC PPA and the circumstances surrounding its negotiation and approval.

#### C. Scope of Work and Objectives

Navigant subsequently was selected through an RFP process to perform the independent assessment ("Investigative Review"). The general objective of Navigant's efforts was to conduct an independent evaluation and assessment of the questions and concerns raised surrounding GRU's negotiation and execution of the PPA, as well as the Equitable Adjustment in 2011, including a review of the decision-making processes by both GRU and the City Commission. The objectives outlined by the City Commission included:

- Recommendations of institutional controls that can be implemented that would help avoid the management discrepancies of the past and help strengthen the working relationship between GRU management and the City Commission; and
- Opportunities for financial and operational benefit to GRU related, but not limited to, the Gainesville Renewable Energy Center (GREC) power purchase agreement.

#### D. Summary of Work Performed

Throughout our efforts, Navigant has been guided by: (i) the scope of work as defined on behalf of the City Commission in RFP No. CAUD1140037-DH for the External Investigative Review of Gainesville Regional Utilities; (ii) issues raised in individual discussions with City Commissioners and certain citizens, and iii) guidance provided by the City Auditor and City Commission in providing oversight during the investigative process.

<sup>&</sup>lt;sup>4</sup> Transcript to City of Gainesville City Commission Meeting In Re: Evaluation of Biomass-Fueled Generation Facility Proposals, May 7, 2009

<sup>&</sup>lt;sup>5</sup> City of Gainesville Request for Proposals for External Investigative Review of Gainesville Regional Utilities, Section I – Request for Proposal Overview & Proposal Procedures, Subsection A. Introduction / Background, dated April 10, 2014

At our request, we were provided with hard copy documents and files from various departments within GRU and the City. Navigant also had full access to electronic records available from GRU and the City including archived emails of current and former GRU/City staff and elected officials. In total, we had access to over 650 Gigabytes (GB) of electronically-stored information ("ESI"), or approximately 65 million pages of potentially relevant information. We selected a significant portion of this information (i.e., approximately 300 GB) for further processing and review. Through a selective evaluation and search criteria, we identified in excess of 200,000 individual emails and user files (i.e., Word, Excel, .pdf) that were ultimately processed and reviewed in relation to our efforts.

Throughout the course of the Investigative Review, we also attempted to interview all those individuals who, to our knowledge, were likely to have significant information relevant to our evaluation and investigation. During the course of our evaluation Navigant conducted over 70 hours of interviews and discussions with over 40 individuals including current and former GRU/City staff, elected officials and citizens of Gainesville with an expressed interest in the outcome of the Investigative Review, as well as certain third-parties who possessed information deemed relevant to our efforts.

The results of the investigative review and this report the organized into the ronowing section
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Independent Investigative Review Conducted by Navigant Consulting		
Section	Title	
Ι	Executive Summary	
II	Scope of Work and Objectives	
III	Financial Overview of GRU and the Electric System	
IV	GRU's Decision to Pursue Biomass	
V	Review of Decision-Making – RFP to Equitable Adjustment	
VI	Assessment of the PPA with GREC	
VII	Financial Impact of the PPA and Outlook for Biomass	
VIII	City and GRU Internal Controls	

#### E. Financial Overview of GRU and the Electric System

Among other aspects of Navigant's Investigative Review, we conducted a high-level review of the financial condition of the GRU Electric System. During the past ten years (2005 – 2014), GRU has faced significant challenges fostered by substantive changing electric customer demographics and usage trends, significant capital expenditures, increases in long-term debt, and the development of the biomass plant, as well as necessary increases in Electric System rates.

1. GRU is a Financially Strong Municipal Utility

With revenues exceeding \$400 million and capital assets exceeding \$2 billion in 2014, GRU is currently the fifth largest municipally run electric utility in Florida and one of the top 100 in the United States. However, while GRU's combined statement of operations portrays a relatively strong utility, it generally does not reflect more fundamental changes and challenges to GRU and its financial condition, particularly in the Electric System. With declining growth in demand, a debt-to-total assets ratio in

excess of comparative utilities, high electric rates, and growing reliance by the City as its primary revenue source, there is increasing financial and rate pressure facing GRU.<sup>6</sup>

2. GRU Faces Challenges in Maintaining its Financial Strength

The City Manager recently highlighted concerns expressed by GRU that growth in transfers to the City's General Fund had "outstripped actual unit sales growth, and the potential for this pattern to continue could impair the financial status of the utility," (i.e., concerns about declining electric sales growth, while electric fund expenses had remained relatively constant or were continuing to increase).<sup>7</sup> Concerns with the General Fund Transfer also underscore larger concerns by GRU's electric customers because of significant rate increases in its Electric System, which have resulted, in part, from GRU's significant capital improvements and investments over the past ten years, as well as substantive increases in debt service resulting from increases in its long-term debt.

While the costs associated with electrical power purchased through the GREC PPA have been at the forefront of concerns over GRU's financial condition and increasing electrical rates; in reality, there are various other factors that have contributed to GRU's increased cost of electricity over the relevant timeperiod. A number of factors including changing customer demographics and electric usage, fossil fuel prices, and fiscal management policies at both GRU and the City, as well as the substantive cost of power purchased pursuant to the PPA, have played a role in GRU's current financial condition and the challenges that it currently faces.

3. GRU's Electric System Rates have Increased Significantly

Based on a limited comparison to selected utilities in Florida, GRU's historical residential power cost per 1,000 kWh has increased from being a lower average cost provider in 2001 to one of the highest cost providers in 2014. A significant portion of GRU's rate increases have resulted from general increases in the cost of fuel and other rising costs that similarly affected other electric utilities in Florida. However, GRU's increasing debt-service requirements, operating expenses, and fund transfers to the City's General Fund, also have had an impact.

4. The Causal Factors for the Increase in Electric Rates are Varied

Beginning in 2006, GRU undertook a multi-year capital improvement program across GRU's service lines that significantly increased its long-term debt, debt service requirements, and impacted GRU's Electric System rates. GRU's capital improvement program also coincided with increased efforts to promote energy efficiency through demand-side management (DSM), the development of a solar feed-in-tariff program, and the pursuit of long-term energy supply that culminated in the PPA. These efforts also occurred during a period where GRU began to experience a declining growth rate in its customer base, as well as a significant reduction in average energy usage per customer.

5. The Impact of the PPA is Compounding Existing Rate Pressure and Sensitivity

In 2014 however, as the GREC biomass facility became operational, GRU realized a significant increase in its fuel adjustment charge due to the substantive cost of electricity purchased pursuant to the PPA.

<sup>&</sup>lt;sup>6</sup> Five Year Financial Forecast FY15-19, City of Gainesville, Florida, January 27, 2014

<sup>7</sup> Ibid

In an effort to alleviate concerns over current electric rates, GRU restructured certain of its bond debt to reduce its base electric energy charge to partially offset the increase in the fuel adjustment charge.

While GRU's efforts may have reduced the first-year impact of the PPA, the debt-restructuring may only forestall the potential impact of the PPA, and could have a negative impact on GRU's ability to secure additional debt in the future. Based on current conditions and observations, GRU may need to increase electric rates in the near future, especially if austerity measures currently being considered and implemented by GRU and the City do not meet current objectives.

In hindsight, questions exist as to the prudence/reasonableness of the timing and the amount of costs incurred relative to the planned development of additional generation capacity, as well as enhanced efforts to promote distributed generation of solar power and energy conservation measures. In addition, GRU's assessment of the combined potential impact of multiple variables appears to have suffered from the lack of a more comprehensive risk management effort to identify and mitigate future scenarios that could, and in some cases have, negatively impacted GRU's financial condition.

Despite questions regarding certain decisions and the transparency into the decision-making process, the various factors contributing to GRU's current financial condition and Electric System rates were discussed with, and ultimately approved by, the City Commission. However, while most decisions in question appear to have been discussed and evaluated at length, it does not appear that many were vetted with the level of rigorous, objective and, at times, independent analysis that may have been required to fully assess the potential impact to GRU and the City.

6. GRU will Face Continued Financial Pressure

GRU and the City have been commended for their strong financial management to date, and have continued to maintain consistently strong credit ratings from the various rating agencies. In providing its rating, Moody's Investor Services commented that "GRU's Utility System Revenue Bonds reflect its resilient service territory, sound risk and liquidity management, and the generally low business and operating risk profile that goes with a diverse revenue stream..."<sup>8</sup> However, Moody's and FitchRatings also have raised concerns with respect to the challenges faced by GRU and the City including the "competitive impact of sizable rate increases to cover energy costs for the biomass PPA," and that "the addition of costly new excess capacity during a period of slower growth and moderate natural gas prices has put a serious strain on electric system financial results." <sup>9, 10</sup>

#### F. GRU's Decision to Pursue Biomass

The primary scope of Navigant's efforts include from the time the City Commission authorized GRU to issue an RFP to solicit biomass-fueled electrical generation in October 2007 until November 15, 2013, the date when the former General Manager (Mr. Hunzinger) left GRU. However, it was important to our efforts to develop an understanding of the primary evaluation criteria and ultimate basis for the

<sup>&</sup>lt;sup>8</sup> Moody's Investor Services, Gainesville (City of) FL Combined Utility Enterprise, November 25, 2014

<sup>9</sup> Ibid

<sup>&</sup>lt;sup>10</sup> FitchRatings, Gainesville Regional Utilities Bonds, December 3, 2014

decision to pursue a 100 MW biomass facility, and how the driving factors in that decision have impacted the current questions and concerns regarding GRU and the PPA.

1. The GREC Biomass Plant was an Ambitious Undertaking

The solicitation, procurement, and development of a 100 MW biomass-fueled generation facility was a large, complex undertaking, as was the subsequent purchase and integration of electrical power from the facility, especially given the composition and cost structure of GRU's existing generation portfolio. While other municipal utilities developed, or were in the process of developing, additional generation resources during the same time-period, GRU's undertaking involved additional challenges derived in part from the City's desire to pursue a biomass-fueled generation alternative, and a size (100 MW) that was significantly outside of the mainstream direction for new generation assets for municipal utilities.

2. The City's Efforts Began in 2003 with an Integrated Resource Plan

The origins of the City's eventual long-term contract and relationship with GREC began with GRU's initial efforts to evaluate future power generation needs through the development of a long-range Integrated Resource Plan ("IRP") in 2003. In the IRP, GRU projected a need for additional base load generation to meet future electric needs as early as 2008, but not later than 2012.<sup>11</sup>

GRU's initial focus in the preliminary IRP was on a proposed 220 MW coal-fired plant with up to 30 MW of biomass. However, GRU's efforts to evaluate alternative generation options were influenced by many factors, a number of which were difficult to fully assess and forecast. These factors included the continued growth in the need for electricity, the price of natural gas, and the potential for Federal carbon-tax legislation, or a Renewable Portfolio Standard ("RPS") in the State of Florida.

3. GRU's Efforts Were Influenced by Heightened Environmental Concerns

GRU's efforts also coincided with significant efforts and changes in Florida to promote energy conservation, fuel diversity, and the development of renewable forms of energy. While GRU at the time supported adding more coal-fired generation capacity with the ability/flexibility to utilize a significant amount of biomass, the open evaluation process coincided with significant interest and concern over global warming, greenhouse gases, and the impact of fossil fuel derived energy use. The Mayor of Gainesville at the time also signed the U.S. Mayors Climate Protection Agreement in 2005 pledging that the City would "strive to meet or beat the Kyoto Protocol" in reducing greenhouse gas emissions.<sup>12</sup>

4. The City's Focus Shifted from Primarily Coal to Exclusively Biomass

As time passed, the City increasingly focused on renewable energy options. After a lengthy evaluation of GRU's IRP and recommendations, coupled with an extensive outreach program to solicit input from the Gainesville community, the City Commission decided to move away from coal as a base-load energy source and to incorporate more renewable energy in GRU's energy supply portfolio. In April 2006, the City Commission formally approved efforts to solicit input regarding the development of

<sup>&</sup>lt;sup>11</sup> Alternatives for Meeting Gainesville's Electric Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

<sup>&</sup>lt;sup>12</sup> Letter from Southern Alliance for Clean Energy to Ms. Pegeen Hanrahan, Mayor of Gainesville, dated November 10, 2005

either a biomass-fueled or integrated gasification combined cycle ("IGCC") generation option, which ultimately led to the issuance of a Request for Letters of Interest ("RFI") in September 2006, and then to the development and issuance of a Request for Proposal ("RFP") in late 2007.

Surprisingly, the City Commission appeared to dismiss the years of analysis and effort conducted by GRU and recommended by GRU management for a smaller biomass option. The decision also appeared to be heavily influenced by the City's desire to minimize its carbon output, consistent with the Mayor's pledge at that time to abide by the terms of the Kyoto agreement. The apparent difference in opinions regarding different directions for GRU's generation planning ultimately resulted in the departure of GRU's long-time General Manager, which left a void in senior leadership at the utility throughout the RFI and RFP process.

5. The City's Shift in Direction Should Have Necessitated Further Review

In essence, the City Commission's directive on April 12, 2006 was a wholesale change in direction for GRU's energy supply planning from the 220 MW solid fuel (coal-based) option (with up to 30 MW of biomass) that had been analyzed, evaluated and subsequently recommended to the City Commission in 2003 to primarily a 75 MW biomass option in its decision in 2006. However, outside reviews in support of the City Commission's decision were not intended, nor should they have been solely relied upon, to evaluate renewable energy options over more conventional (fossil fuel) forms of generation, as was the original scope of GRU's work. The shifting priorities should have necessitated a new, or alternative, planning study rather than continuing to evaluate the current planning study (i.e., IRP) under a different set of priorities.

Further, while costs of production and customer rate impacts were evaluated (i.e., the objective to keep electricity costs affordable), they do not appear to have been significant drivers in the City Commission's ultimate decision to pursue a biomass-fueled generation option, nor assessment of the potential concurrent impact of GRU's substantive capital improvement program.

6. The Biomass Option Faced Significant Uncertainty and Risk

By pursuing the biomass alternative, GRU faced significant risks and challenges, the significance of which were dependent on various market and regulatory assumptions, as well as GRU's ability to address, mitigate and/or minimize the key risks. The key drivers affecting GRU's and the City's decisions included uncertainty surrounding GRU's projected load growth, fossil fuel prices, unregulated spot market prices, potential environmental regulations, and the degree of success of GRU's voluntary DSM programs.

Renewable energy sources of electricity did not account for a large portion of Florida's energy production in 2004. Despite the fact that the biomass industry was well-established, it was not typically used as direct-fired generation by utilities, nor on the scale proposed by GRU (i.e., most biomass facilities were less than 50 MW and came from non-utility generators).<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> A Review of Florida Electric Utility, 2004 Ten-Year Site Plans, Prepared by the Florida Public Service Commission, Division of Economic Regulation, December 2004

In hindsight, GRU's decision to pursue renewable energy to meet its forecasted energy needs, rather than a more conventional fuel source as originally recommended, is one of the primary causal factors for the issues faced today. The City's decision to pursue a non-conventional alternative in a biomass fueled power generation plant had significant additional risk that was not adequately assessed or managed.

#### G. Review of Decision-Making - RFP to Equitable Adjustment

Among other aspects of Navigant's Investigative Review, Navigant was tasked with evaluating the decision-making processes and relevant transactions occurring from the time the City Commission authorized GRU to issue an RFP to solicit biomass-fueled electrical generation in October 2007 until the departure of the former GRU General Manager, Mr. Hunzinger on November 15, 2013.

1. Navigant did not Identify Evidence of Impropriety or Wrongdoing

Throughout the Investigative Review, Navigant's efforts were focused on the decision-making around the development and solicitation of proposals for the biomass-fueled facility, as well as the selection of Nacogdoches Power (as predecessor to American Renewables), and the ultimate negotiation and execution of the PPA with GREC. However, we did not identify evidence of impropriety or potential wrongdoing that would question the integrity of the RFI/RFP processes or the validity of the GREC PPA and subsequent Equitable Adjustment.

While numerous questions and concerns have been raised over the years regarding the propriety of the negotiation and decision-making processes around both the GREC PPA and the Equitable Adjustment, Navigant did not identify evidence that would further these concerns.

2. The RFI/RFP Processes were Robust but had Several Shortcomings

The processes followed by GRU and the City in their efforts to solicit and select a vendor for the proposed biomass facility were largely sound and followed best-practice in certain areas, but they were not without shortcomings. Most notable among the deficiencies observed included: 1) the issuance of an overly broad RFI and RFP, 2) the failure to include a preferred form or draft PPA in the RFP, 3) failure to require that the proposed pricing in the binding proposals be firm through a specified date, 4) failure to specify the range of power/capacity GRU was seeking, and 5) failure to include ratepayer impact as an evaluation criteria in the ranking process. Not including the foregoing in the RFP and proposal evaluation process likely had a negative impact on the vendor solicitation, ranking and selection process, and ultimately GRU's efforts in the PPA negotiation and execution.

3. The Equitable Adjustment Derived from a Change in 2009

While the Equitable Adjustment was executed in March 2011, and the ramifications of which were not fully realized by the City Commission until 2013, the decision precipitating the contract amendment appears to have been made within a relatively short time-frame after the approval of the PPA in May 2009...a decision apparently agreed to by GRU's Senior Management. Ample evidence exists to support that the decision to change from a Selective Non-Catalytic Reduction ("SNCR") system to a Selective Catalytic Reduction System ("SCR") for air emissions control was made in late 2009, if not sooner, as the proposed facility with the SCR served as the basis for the applications filed regarding site

certification and emissions to the Florida Department of Environmental Protection ("FDEP") in November 2009.

4. We Observed No Evidence to Support a Change in Law

Despite assertions by GREC that regulatory requirements as interpreted and imposed by the FDEP were changed, we did not identify conclusive evidence that this was the case, especially since no formal position was ever taken by FDEP. In addition, we have reviewed certain memoranda and opinions provided in relation to the Equitable Adjustment and whether the described circumstances constituted a "Change in Law" under the PPA. However, we have identified no evidence that would support a different conclusion from those reached by Orrick, Herrington & Sutcliffe LLP, the City Attorney, or the opinions originally expressed by Mr. John Stanton in this regard.

5. The Change from an SNCR to a SCR was Likely Prudent

However, despite our opinions regarding the applicability of the Change in Law provision in this circumstance, we stop short from taking the position that the change from the SNCR to the SCR was not a prudent decision, or that the decision ultimately did not facilitate and streamline the permitting process with FDEP. Based on our review of information and interviews of individuals in this process, and despite the failure to disclose the perceived need and/or implications of the change to the SCR, we do not find it unreasonable that the former General Manager believed that the City Commission had provided him with the requisite authority to negotiate the Equitable Adjustment, that it was a prudent decision based on the status of the development and permitting for the biomass facility, and that the change was in keeping with the City's environmental preferences.

6. The Equitable Adjustment Exposed Contract Management Deficiencies

While we do not raise significant questions regarding the ultimate decision, in our opinion the decisionmaking process suffered from significant deficiencies including: 1) GRU's failure to more timely evaluate the potential economic impact of the proposed change, 2) the failure to participate in meetings with FDEP leaving GRU subject to the interpretations and representations of GREC as to the content and direction of FDEP's positions, 3) the failure to keep the City Commission apprised of the change in 2009 including the potential need to amend the PPA, and 4) the failure to seek approval, or at least inform, the City Commission of the Equitable Adjustment and its potential impact to GRU's customers.

#### H. Assessment of the PPA with GREC

On May 12, 2008, after receipt and evaluation of the three binding proposals submitted pursuant to the RFP, the City Commission voted to approve the recommended rankings and selection of Nacogdoches Power provided by GRU staff.<sup>14</sup>

1. The PPA was Properly Authorized but Poorly Executed by GRU

The City Commission authorized GRU to proceed with PPA negotiations with Nacogdoches Power on the basis of a proposed 20-year term, specified pricing and a certain risk profile consistent with the terms in GREC's binding proposal. However, the ultimate PPA differed substantially from the

<sup>&</sup>lt;sup>14</sup> City of Gainesville, City Commission Meeting Minutes, Monday, May 12, 2008

arrangement originally authorized by the City Commission. Over the course of the negotiations, various components of GREC's binding proposal were changed or eliminated including:

- The PPA term was extended from 20 to 30 years;
- The "Take-or-Pay" arrangement in GREC's proposal was changed to a "Take-and-Pay" structure preferred by GRU in the RFP;
- GRU's "Right-of-First-Refusal" on the potential future sale of the GREC facility was changed to a "Right-of-First-Offer" concept;
- GRU's right to "Terminate for Convenience" was eliminated;
- The pricing related to total nominal non-fuel payments to GREC increased significantly from \$936 million in GREC's binding proposal to more than \$1.9 billion in the executed PPA; and
- Numerous risks were shifted from GREC to GRU.
  - 2. Large Purchase Power Agreements (PPAs) are Complex

While not uncommon, large PPAs are complex, long-term contracts involving a multitude of factors and assumptions that require significant expertise and experience to negotiate. Given the average length of PPAs and their dependence on various factors and assumptions, the relative cost/benefit of a PPA may change from year-to-year, and must be evaluated over the term of the agreement.

3. GRU's Decision to Pursue 100 MW vs. 50 MW in the PPA Added Risk

The potential cost impact of the GREC PPA to GRU and its customers has always primarily depended on GRU's ability to market and resell up to 50% of the GREC Power. However, GRU's decision to take 100% vs. 50% of the biomass facility output does not appear to have been analyzed in-depth. The ramifications of the agreed purchase of up to 50 MW (if not more) of higher-cost electric power generation than needed by GRU should have necessitated greater discussion, analysis and risk assessment.

4. GRU should have Terminated Negotiations when the Pricing Changed

GRU should have terminated negotiations with GREC when GREC increased the proposed pricing several months after selection of GREC's "binding proposal." Under general governmental procurements, if an acceptable contract cannot be negotiated with a selected bidder, it is not uncommon for buyers to terminate negotiations and move on to the next highest ranked proposer when changes of the magnitude requested by GREC are proposed.

5. GRU's Decision to Exclude a "Back-out" Clause Added Risk

In light of the circumstances and changing market dynamics influencing both the need and justification for pursuing the 100 MW biomass-fueled facility, GRU's inability to structure a Termination for Convenience clause, which is not uncommon in governmental procurement contracts, exposed GRU to substantive known, as well as unknown, risks over the term of the negotiating and permitting period. In hindsight, GRU should have insisted on a PPA concession from GREC when GRU agreed to eliminate the Termination for Convenience provision in the PPA.

6. GRU Accepted Significant Risks in the Contract with Few Concessions

While efforts to evaluate the contract terms before and during negotiations focused on many of the applicable key risks, GRU appears to have accepted the removal or modification of those terms with little apparent benefit to GRU and its customers. From GRU's initial decision to purchase the full 100 MW of power under the PPA, to the extension of the term from 20 to 30 years, to the substantial increase in pricing (including an adjustment to protect GREC from construction cost increases), to the removal of the Termination for Convenience, and the modification of the Right of First Refusal to a Right of First Offer, GRU assumed significant risk and limited its ability to mitigate future risks under the PPA. Other than some minor changes in the PPA, it does not appear that GRU realized many benefits from the negotiations.

7. Other Terms in the PPA are Unbalanced in Favor of GREC

In addition to the various risks assumed by GRU in the PPA, various other terms in the PPA are unbalanced in GREC's favor including language in the PPA with regard to the Change in Law, Performance Security, and the Unavailability Factor for Liquidated Damages. Various other risks also transferred from GREC to GRU in the negotiation process including the construction cost risk and the property tax responsibility.

8. GRU Failed to Adequately Evaluate, Address and Communicate Key Risks

GRU recognized many of the key risks associated with the PPA but did not adequately evaluate, address, continue to monitor, or communicate the risks to the City Commission, as well as others. GRU clearly understood the importance of marketing and reselling the 50 MW or greater of excess power under the PPA, but was slow to start the process of evaluating the market, and did not routinely communicate the status of, or difficulties associated with, those efforts.

In addition, GRU does not appear to have performed a comprehensive risk analysis of the primary drivers, assumptions or key risks associated with the biomass facility either before, during or after execution of the GREC PPA. While many of the key risks were known and the primary reasons for pursuing the GREC facility continued to be reiterated, we did not observe the level of in-depth analysis we would have expected with regard to the significant impact these risks posed on both the terms, as well as the success, of the GREC PPA.

9. GRU Appears to be Overpaying for Fuel under the PPA

Pursuant to the PPA, GREC is responsible for purchasing the fuel required to operate the plant. However, based on a comparison and preliminary analysis of the heat rate used to evaluate GREC's binding proposal and the heat rate incorporated in the PPA, GRU may be paying for excess fuel costs, and we believe that a more extended analysis is warranted.

10. GRU's Efforts were driven by a Perceived Mandate from the City Commission

In hindsight, the pursuit of biomass, negotiation of the PPA, and the subsequent Equitable Adjustment, appear to have been guided more by meeting a perceived mandate from the City Commission, rather than an objective analysis and assessment of GRU's needs, costs and risks. While the process followed was generally sound, and many of the key risks known from the outset, the decision-making appears to

have been more influenced by the drive for a "biomass-fueled renewable energy" source and the City's desire to comply with the Kyoto protocol rather than sound business and risk analysis, and concerns about customer rate impacts.

11. Inconsistent Leadership and Decision-Making Likely Impacted the Process

GRU (and the City's) evaluation of their long-term energy supply needs, the negotiation of the PPA, and subsequent permitting through the successful launch of the GREC facility, spanned eleven (11) years, four (4) GRU General Managers, four (4) Mayors, and over twenty (20) different City Commissioners. While the breadth of individuals involved in this process speaks to the amount of input from GRU, the City, and others provided over the years, it also raises concerns regarding lack of continuity around the evaluation, assessment and analysis, as well as the ultimate implementation of the decisions.

#### I. GREC PPA – Financial Impact and Outlook for Biomass

On May 7, 2009, when the GREC PPA was approved by the City Commission, GRU estimated that the monthly fuel adjustment impact on a typical GRU customer (1000 kWh/month) could range from \$4 to \$8 in 2014 "assuming approximately one-half contractual third party participation" (i.e., GRU's ability to resell up to 50% of the 100 MW of generated electricity to someone else at market rates).<sup>15</sup>

As is evident from the comments made before the City Commission in 2009, the success and potential impact of the PPA on GRU's ratepayers was dependent on various 'assumptions' about **the "outcome of climate change legislation, changes in the cost of fossil fuels...[and] third party contractual unit participation**" [emphasis added]. Ultimately, the actual impact has, and could continue to be, larger than anticipated due in part to the Equitable Adjustment and GRU's inability to involve "approximately one-half contractual third party participation" as assumed in May 2009, as well as adverse trends and the outlook for various key drivers and "sensitivities" as described above.

1. The Key Risks were Known by GRU from the Outset

Many of the risk factors that have ultimately led to increased costs associated with the PPA were known by GRU and the City from the outset. From its initial assessment of a dedicated biomass-fueled generation option through the execution of the PPA, GRU and the City Commission's decision was driven primarily by the perception, and belief, in certain key variables (and risks) including:

- The need for base load capacity to meet increasing demand;
- Concern regarding the price and volatility of natural gas;
- o Growing concern for the environment and impact of Greenhouse Gases;
- That renewable energy would be more costly than fossil fuels;
- The need to resell excess capacity during the initial years; and
- That federal carbon tax legislation and/or a Florida RPS were imminent.

The inherent risks in the PPA and biomass project also were echoed by citizens, independent industry reports, and the Florida Public Services Commission (Florida "PSC") during the determination of need

<sup>&</sup>lt;sup>15</sup> May 7, 2009, City Commission Meeting Minutes, and Public Hearing Transcript

process for the GREC plant. In addition, there were times throughout the contract negotiations, determination of need and permitting processes where GRU had the opportunity to reevaluate the key determinants of their decision, but failed to do so and continued to fully support their decision.

In essence, however, GRU has been wrong to date, on most of the key determinants it has continually referenced in supporting the need for the GREC biomass facility including the forecasted demand for electricity from GRU customers, the volatility and price of fossil fuels, federal carbon tax legislation and a State RPS, and GRU's ability to resell any power that it does not need.

2. GRU's Ability to Resell Power from GREC is Impacted by Several Key Factors

While the GREC facility, and purchase of power under the PPA, did not start until late 2013, the current and future potential impact of the PPA has been exacerbated by various aspects of the GREC contract that added risk to GRU and the City. The single-largest factor influencing GRU's current operations, and the PPA's impact on GRU's ratepayers, is their inability to resell a significant portion of the unneeded GREC power, which has been exacerbated by GRU's declining need and load forecast, and the significant cheaper price of power generated from alternative fuel sources (i.e., natural gas).

While GRU has expended effort over the years to market and resell the excess power, it should have been readily apparent that their ability to resell would be significantly constrained without favorable trends in fossil fuel prices and/or regulatory changes. Despite attempts to provide assurance to the City Commission in May 2009, and the Florida PSC in 2010, it does not appear that GRU has had any qualified interest from potential purchasers, and is likely not expected to, absent changes in the key drivers noted above.

3. Cost/Customer Impact was not a Key Criteria in the Pursuit of Biomass

The inclusion of some amount of renewable energy was always part of the conversation regarding a long-term electrical supply for GRU. <sup>16, 17</sup> It also was generally known that renewable energy, including biomass, was more expensive than more conventional fuel sources. However, it also was believed that the biomass option was one that potentially could have significant rewards if current trends in the U.S. continued to favor more renewable forms of energy. While costs of production and rate impacts were evaluated to some extent, they do not appear to have been significant drivers in the City Commission's ultimate decision to pursue the biomass option. In addition, through the evaluation of GREC's proposal, and the negotiation of the PPA, there appears to have been limited assessment (and/or projections) of the overall/combined impact of these factors on GRU's electric rates and ratepayers.

4. GRU's Forecasted Need for Electricity has Declined Significantly

GRU's message regarding the need for additional electrical generation and the various market conditions and trends has been consistent from 2003 through most of the decision-making process with regard to the PPA and the GREC facility. However, many of the underlying concerns and assumptions

<sup>&</sup>lt;sup>16</sup> Preliminary Integrated Resource Plan to Meet Gainesville's Electrical Needs through 2022, Presentation to the Gainesville City Commission, by the Gainesville Regional Utilities, December 15, 2003

<sup>&</sup>lt;sup>17</sup> Opportunities to Expand Our Use of Renewable Energy Resources, Presentation to the Gainesville City Commission, Gainesville Regional Utilities, March 22, 2004

have not yet materialized, or materialized to the extent believed by GRU at the outset; and the conditions for many, in fact, seem less favorable or are trending in the opposite direction.

5. Fossil Fuel (Natural Gas) Prices have Declined Rather than Increased

A key determinant cited by GRU in its efforts to promote additional coal-based electrical generation (initially), and subsequently biomass-fueled electrical energy, was the volatility of natural gas prices. However, despite significant increases in the volatility and price of natural gas in 2008, which reinforced the opinions held by GRU and the City Commission at the time, the U.S. natural gas industry was about to undergo a significant transformation.

In 2008, and building thereafter, the rapid increase in the development of natural gas from unconventional sources (i.e., shale-gas) began to have an impact on the supply and price of natural gas, which has ultimately contributed to a significant, and sustained, reduction in the price of natural gas. In turn, the low price of natural gas has, and is expected to continue to, put pressure on biomass and other renewable forms of energy making them less competitive with some regulatory or legislative policies supporting or encouraging their more rapid adoption.

6. Carbon Tax Legislation and a Florida RPS have not been Implemented

As existed in 2008 and 2009 when the GREC PPA was being negotiated and executed, the biomass power market was largely dependent on the passage of federal carbon-tax legislation, or a RPS in Florida. However, the market continues to face significant policy uncertainty and challenges relative to the cost of fossil fuels.

Based on current legislation pending before the Florida State Legislature, there is no indication that a RPS is currently being considered. Further, there is no pending federal legislation that would impose constraints on the use of carbon-based fuels. However, the EPA's Clean Power Plan ("CPP") developed under Section 111(d) of the Clean Air Act and proposed in June 2014, focuses on limitations on CO<sub>2</sub> emissions from existing power plants that could have a significant impact on the development, as well as retirements, of future coal generation in the U.S., but the CPP is currently facing serious legal and political challenges.

7. The Current Outlook for Biomass is not Expected to Change

The outlook for renewable energy depends in large part on the outlook for the energy industry as a whole, which is facing significant change driven by various factors including declining demand growth, shifting sources of generation, emerging technologies, new market models, and the abundance of natural gas due to the U.S. shale-gas boom, as well as potential regulatory changes such as the CPP.

Although a significant change in any of these determinants could have a positive impact on GRU's ability to more effectively integrate the GREC power into its generation mix, and lessen the impact to GRU's ratepayers, the short-term outlook for such changes is not positive. While factors influencing GRU's demand growth have improved (i.e., number of customers, average kWh usage), improvement in other factors is also dampening growth (i.e., energy efficiency, distributed generation). Further, natural gas prices are also expected to remain low over the foreseeable future.

Regardless of these trends, the concept of carbon tax legislation and ongoing efforts by the EPA to regulate fossil fuel usage through controls over emissions (e.g., the CPP), still lead many to believe that future regulations will ultimately drive up the cost of power associated with fossil fuels to the benefit of renewable energy like biomass.

8. The PPA is Partially Responsible for Cost Increases to Consumers

There were various factors that caused the projected and actual costs to GRU under the PPA to be significantly higher than originally estimated. Many of the increased costs were the result of GRU's acceptance of greater risk under the contract and GRU's inability to effectively address or mitigate many of the key risks and assumptions known under the contract from the outset.

In its Biomass Plant Risk Assessment Summary, GRU estimated the potential impact to GRU customers (i.e., based on an average 1,000 kWh residential bill per month) at \$10.56/month in 2014 before potential offsetting adjustments, and \$5.12/month in 2019. <sup>18</sup> In addition, both of these numbers were presented with the potential to significantly offset such cost increases based on various potential savings. However, many of the proposed savings had not been pursued in depth at the time of GRU's presentation to the City and amounted to nothing more than "best-guesses." Most, if not all, have proven to be unattainable to date including the assumption regarding the resale of 50 MW of output.

9. The Increases in GRU Electric Rates are Attributed to Many Factors

GRU's electric rates have increased significantly since 2005, which has been an issue of increasing concern to various citizens and critics of the GREC PPA. As has been noted in various GRU presentations to the City Commission, GRU's relative competitive position in providing electric service has changed significantly from being one of the lowest cost providers in 2001 to one of the highest cost providers in 2014. While the costs associated with electrical power from the GREC PPA have been at the forefront of concerns over GRU's increasing electrical rates, in reality there were numerous factors that contributed to GRU's increased cost of electricity.

The change in GRU's comparative position has resulted from a number of significant rate increases that occurred during the period 2001 to 2008, and again from 2013 to 2014. However, from 2001 to 2006, GRU's rate increases were consistent with the average rate increases of other utilities during the same period, driven in part by increasing fuel costs, inflation and other factors. The most significant differences between GRU and the average rates of other utilities occurred from 2006 to 2007, as well as 2013 to 2014. These rate increases, which were more specific to GRU's circumstances, resulted from a number of factors including:

 A multi-year capital improvement/expenditure program across GRU's service lines started around 2006, if not before, that included a significant upgrade to the Deerhaven 2 plant, the construction of the Eastside Operations Center, and upgrade to its financial management system;

<sup>&</sup>lt;sup>18</sup> Contract for Biomass-Fueled Generation, Presentation to the Gainesville City Commission, May 7, 2009

- The implementation of energy efficiency and DSM programs to promote energy conservation with the City and GRU's customers; and
- The need to maintain gross revenues and significant General Fund Transfers to the City despite a declining base of electric customers and average energy use per customer.

However, it also is important to point out that GRU is only in the second year of a 30-year PPA and, while costs associated with purchased power from the GREC facility are higher than conventional alternatives (which was known from the outset), the future may yet prove the value of the PPA to GRU and its customers.

10. Failures in Risk Mitigation and Planning Obscured the Real Cost Impact

In hindsight, GRU should have established and maintained an effective risk management program with continual assessment and benchmarking to the original key assumptions, drivers and risks affecting the success of the PPA, as well as the impact to GRU's customers. The shifting priorities on long-term electrical generation needs, significant market and regulatory uncertainties, and the lack of continuity in the senior management at GRU and City elected officials, made effective planning, as well as risk management, paramount to the success of the biomass effort. While GRU and the City Commission certainly made significant efforts in relation to all of these areas, the complexity of managing through significant change underscores the importance of clear strategic objectives, a seasoned and committed management team, and effective communication between a utility and its governing body.

#### J. City and GRU Internal Controls

Despite lengthy efforts by GRU and the City to evaluate their long-term energy supply needs and to put the necessary contract solicitation, negotiation and management framework in place to provide assurances to the City Commission and GRU's customers, significant cost increases in the GREC PPA, as well as increased risk, were the result of many common challenges faced by complex contract negotiations...including deficiencies in project management and governance.

Throughout various periods, it is apparent that the City Commission was not kept adequately informed of the actual status of the various risks inherent to the PPA. Due in part both failures by management and deficiencies in governance by the City Commission, the City Commission was deprived of relevant information that would have been necessary for informed decision-making. Throughout our evaluation and interviews of various current and former GRU/City staff and elected officials, we observed a concern with whether individuals on the City Commission were receiving adequate, as well as consistent information.

While the general long-standing relationship between GRU Senior Management and the City Commission appears to have been good, there were periods where an undercurrent of distrust existed and a general feeling that members of the City Commission were being selectively provided with information that would lead to a predetermined conclusion. Such concerns combined with unanswered questions and surprises in relation to the PPA over the years have contributed to a perceived lack of transparency and accountability by GRU, and in some respects the City Commission, among members of Gainesville community. 1. The City Commission Relied on GRU for Adequate Information

The City Commission relied on GRU for adequate information regarding the GREC PPA. However, as is often the case with elected officials, the attention of the City Commission suffers from the competing demands in relation to the day-to-day operational and public issues that face a large city government and municipality like Gainesville. Although it was the responsibility of GRU to ensure that accurate and adequate information was being provided to the City Commission, it was equally incumbent upon the City Commission to ensure they were receiving adequate information, to ask appropriate questions, and to seek additional information where warranted, to provide the necessary foundation for effective decision-making.

2. The City's and GRU's Internal Controls were Sound

Throughout the time-period, GRU was subject to the City's existing governance structure and internal controls, which were based on a robust framework of corporate policies, standards and operating procedures, many of which were implemented in 2006 before the issuance of the RFI and subsequent RFP, as well as the negotiation of the PPA.

While we identified certain issues in relation to GRU management and governance by the City Commission, we did not identify significant gaps in GRU or the City's financial controls, noting that the applicable policies and procedures were periodically evaluated by the City's Internal Audit Department and generally followed by GRU. However, while many of the questions and concerns we evaluated appear to have been focused on the causal factors for the increased actual and projected costs of the PPA, the PPA entails significant risks that could have been avoided or partially mitigated with more effective governance and management control tools, as well as more effective communication.

3. Challenges Resulted from Shortcomings in Management and Governance

It is well-recognized that one of the critical factors that influences the success of any organization is the existence of both effective governance and management, and the policies, procedures and controls to ensure that a governing body's strategic objectives are being followed and met. Often, failures occur when the governing body fails to place significant focus on whether sufficient safeguards are in place to ensure the efficient and effective management of the organization.

Based on interviews of current and former GRU and City personnel, and a review of emails and other notes, with regard to pursuit of a biomass-sourced energy supply and the PPA negotiations, it would appear that the City Commission was so intent on its commitment to biomass, that the line between effective governance and management may have become blurred.

4. Effective Communication between GRU and the City was Lacking

At times, throughout the contract negotiation and management process there appears to have been ineffective communication between GRU and the City Commission. While the City originally envisioned a strong management and governance structure with the designation of the GRU General Manager as a Charter Officer, ineffective oversight and communication between the General Manager and the City Commission at times, especially as its relates to risk management, hampered the City

Commission's ability to effectively identify and address many of the key risks in its decision-making in relation to the biomass contract.

The communication process between the City and GRU, an important control function, included both public and informal meetings regarding the status of the PPA. However, overall the City Commission appears to have had poor visibility into the actual status of the contract and contract negotiations, as well as subsequent changes and amendments that occurred during the permitting of the GREC facility. In hindsight, the City Commission appears to have placed too much reliance on individual communications, at the risk that information may have been incomplete, filtered, or edited, even in good-faith ways.

5. The City would have Benefitted from Greater Outside Assistance

While the City Commission recognized the importance of external third-party guidance in relation to the assessment of the various options for GRU's long-term electrical supply, the City Commission did not utilize such guidance in relation to the negotiation of the PPA or the overall assessment of risks in the contract, and how those risks were being addressed and/or mitigated.

6. Greater Involvement by the City Auditor may have been Beneficial

The City Commission could have more effectively utilized the City's Internal Audit Department to independently monitor or evaluate the negotiation or performance of the contract, or to ensure adequate visibility into the terms of the contract relative to the City Commission's objectives, and that risks were being properly identified and mitigated.

7. Inconsistent Leadership at GRU Contributed to Risk and Control Issues

While the reasons for the inconsistencies and failure in communication on the part of GRU appear to have been varied, many of the challenges likely were impacted, and are continuing to be impacted, by a lack of consistent leadership and direction at GRU and in many of its Senior Management positions, as well as significant changes among the City's elected officials.

The lack of consistent leadership and commitment to the City's long-range electrical supply plan likely affected efforts to address many of the key risks, challenges and questions faced regarding the PPA. Absent the continuity of an experienced senior management team, GRU appeared to take on greater risk in the PPA negotiation process, and continued to pursue development of the biomass option in light of growing questions and concerns, as well as customer demographics, electric usage and regulatory trends to the contrary.

#### K. Summary Findings and Observations

In retrospect, ample evidence existed of the significant challenges and costs facing the successful development and launch of a biomass-fueled energy supply for the City, far in advance of the concerns expressed since GREC became operational, and the relative impact of its cost to the utility and its customers became apparent. Unfortunately, the information communicated to the City Commission was often too high level to provide the basis for any significant discussion regarding the risks and challenges that existed in the program at various points in time. In addition, the information

communicated was often oversimplified, and carefully managed through individual meetings with Commissioners, and portrayed the PPA in the best possible light.

Ultimately, despite various avenues of information available to the City Commission, each had failings in providing it with adequate information for informed decision-making around the significant challenges facing the GREC project. Regardless, the City Commission still had the responsibility to insist upon additional information and clarification when inconsistencies or concerns existed, especially in light of the growing sentiments and concerns expressed by certain GRU customers.

Navigant recognizes that both GRU and the City are already addressing some of the issues identified in this Report, including evaluating the potential transition in governance of GRU, and the importance of an experienced senior management team. In addition, it is important to note that while the governance structure of GRU is currently in question, the same holds for many other public utilities as they look to find better ways to address the complexities of operating in today's utility industry, and under the increasingly watchful eye of accountability. We also understand that GRU and City have already adopted certain new practices with regard to communication between GRU and the City Commission, which we believe were necessary and prudent steps, and that GRU continues to evaluate measures that would enable them to better manage the PPA and provide rate relief to its customers.

#### L. Recommendations for Operational and Financial Benefit

Navigant has reviewed the PPA carefully with the objective of identifying opportunities under which GRU could improve the economics of the transaction. While no such opportunities were identified that GRU could exercise unilaterally (i.e., without the concurrence of GREC), there are several potential options that warrant review (or further review) and would require GREC's cooperation and, ultimately, an agreed renegotiation of certain PPA provisions. Clearly, for a renegotiation of the PPA to be successful, there has to be value to both parties.

In addition, GRU continues to evaluate ways to enhance its operations with regard to its commitments under the PPA, as well as opportunities for financial relief to its ratepayers. Navigant has reviewed and discussed many of these efforts and find them to be reasonable and prudent, as well as note that certain past efforts should be revisited. Provided below are a series of recommendations that GRU should consider related to the PPA and GRU's power supply options.

1. Reconsider a Prepayment Arrangement

In the May 7, 2009 GRU presentation to the City Commission recommending approval of the PPA, GRU indicated that a Prepayment Restructure of the PPA would mitigate the monthly retail rate impacts on consumers' bills associated with the GREC project. Specifically, it was projected that the 2014 and 2019 monthly bills for a residential customer using 1,000 kWh would be reduced by \$2.22 and \$2.10, respectively. As such, at the time, GRU correctly recognized that a tax-exempt prepayment arrangement would reduce power purchase costs over the term of the PPA.

During 2011 and 2012, GRU received detailed presentations from investment banks including Goldman, Sachs & Co., Bank of America, Merrill Lynch and J.P. Morgan concerning the potential benefits of a prepayment arrangement. All presentations indicated that GRU would realize substantial savings by

pursuing a prepayment arrangement. By financing a prepayment restructuring of the PPA with taxexempt debt, GRU could potentially provide economic benefits for its ratepayers. It is not clear why GRU has not continued to aggressively pursue this option.

2. Convert PPA to a Tolling Agreement (GRU Purchases Fuel Handling Facilities)

Most PPAs involving the purchase of the full output of a generating unit are tolling agreements. Under a tolling agreement, the Buyer secures the fuel necessary for the plant's generation. The Seller essentially provides the conversion machine (i.e., the power plant) for converting one form of energy (the fuel) to another form of energy (electricity). Since it appears that the current fueling arrangement for the GREC plant may not be to GRU's benefit, converting the PPA to a tolling agreement warrants review. Under such an arrangement, GRU would be responsible for securing the fuel for the plant. Since such an arrangement is currently prohibited by the terms and conditions of the PPA, a renegotiation would be required.

Along with converting the PPA to a tolling agreement, in order to provide some incentive to GREC to participate, GRU may want to pursue purchasing the Fuel Handling System and assume responsibility for fuel handling operations. The overall plant arrangement is such that ownership demarcations for the Fuel Handling System could be readily established.

3. Reduce Minimum Dispatch in PPA to 55MW

Section 10.6 of the PPA sets the minimum dispatch for the Project under non-emergency operating conditions at 70 MW. During a System Emergency, for a period not to exceed one hour, the project may be dispatched between 50 MW and 70 MW. However, we understand that operating a minimum dispatch of 55 MW would have significant benefits to GRU from an operational perspective. A combination of the GREC 70 MW minimum dispatch and the Deerhaven minimum loadings is apparently causing GRU to dump energy (i.e., sell at a loss) during nighttime hours. We believe an effort to evaluate a reduced minimum dispatch in return for some increased payment or other PPA concession (i.e., relative to GRU's current incremental costs) is warranted.

4. Shift Payment Terms in the PPA

Another option that could be considered would be to attempt to negotiate for lower payment terms in the initial years and higher terms in the latter years of the contract. Such action would not only relieve the rate pressures from the PPA, but also may allow enough time to pass for the biomass resource costs to become more favorable in relationship to the cost of gas, or for carbon constraint legislation and/or RPS in Florida, to be passed.

#### M. Recommendations for Institutional Controls

Based on Navigant's review of policies, procedures and internal controls that define and distinguish the relevant governance and management practices between the City and GRU, Navigant suggests a number of governance and management control-related recommendations to improve the effectiveness and oversight of GRU.

1. The Authority Granted the General Manager is Believed Appropriate

The City Charter provides extensive authority to the General Manager for Utilities while placing certain restrictions on the City Commission related to Utility System matters. While broad, Navigant believes the current provisions yield more benefits to a municipal utility and city like GRU and Gainesville, respectively. In addition, in hindsight, many of the concerns and challenges related to the PPA were principally due to poor governance, communication and the lack of effective management control tools, rather than the level of authority granted to the General Manager.

The current authority granted to the General Manager allows the General Manager to effectively run the organization without the political, operational and financial overhead and other burdens typically experienced by utilities that are treated as a department of the city. However, effective governance requires not only a committed governing body and comprehensive internal controls, but strong Senior Management. The most effective governance (and management) occurs between a strong governing body and strong General Manager with appropriate qualifications, a willingness to take a stance on critical issues and make hard decisions, and an understanding of the obligations to communicate openly, including taking the time to educate, when needed, on why issues are important.

2. GRU and City Policies and Procedures were Sound but Not Always Followed

A review of the GRU Purchasing Procedures Manual determined that GRU's Purchasing Manual is consistent with the City's approved Purchasing Policy Resolution. The applicable rules concerning thresholds for City Commission approval are clearly defined, and the processes for seeking bids and making purchases are clearly laid out. There are provisions within the GRU Procedures for obtaining City Commission approval when required, and a section that discusses modification of contracts.

As far as the issuance of the RFI and RFP for the biomass PPA, it would appear that all of the policies and procedures were followed up to the point of approval by the City Commission. However, while the City and GRU purchasing policies and procedures appear to be adequate and were followed up to the point that complex contract negotiations began between GRU and GREC, to further strengthen controls, the City and GRU should consider making the following modifications when dealing with a complex contract that requires negotiation with a selected vendor.

- Authorize the General Manager to only negotiate a contract with a selected vendor, and require that the negotiated contract be brought back to the City Commission for ultimate approval;
- Require the City Attorney's approval of a complex contract before it is executed; and
- Require the General Manager to provide updates to the City Commission if there are issues that arise during the negotiation in relation to certain pre-determined key terms (e.g., pricing).

In addition, Navigant has observed the existence of several other corporate policies that often can provide more instructive controls over the purchasing function and recommend that the City evaluate the applicability of such controls to its existing policy framework including:

• *Delegation of Authority* – establishes delegated signature authority for signing contracts, authorizing purchases, authorizing projects and approving disbursement of funds.

- *Competitive Bidding Procurement* outlines standards associated with vendor sourcing and qualification, competitive pricing, purchase orders, vendor contracts and vendor assessments, among others.
- *Contract Approval Forms* to authorize the acquisition of goods or services, and which include relevant information related to the good or service including service descriptions, contract start and end dates, estimated hours and rates, and not-to-exceed amounts, as well as the required approval signatures of the designated individuals.
  - 3. Communication between GRU and the City Commission should be More Formalized

The City Commission, as is typical with many municipal governing bodies, as well as Boards of Directors for that matter, has very little day-to-day interaction with the operations of GRU. Throughout the PPA negotiation and execution process, some City Commissioners appear to have received limited briefings in individual meetings with GRU senior management. However, the attention of the City Commission suffers from the competing demands in relation to the day-to-day operational and public issues that face a large city government and municipality like Gainesville.

It is believed that a more formalized communication process, with regular meetings and established agenda items and management reports, would provide greater transparency and the conduit, as well as time, for more structured discussion and debate. While we currently understand that GRU has implemented steps to provide more structure and formality to its public discussions and presentations before the City Commission, we have not evaluated such efforts as a part of this review. However, we strongly encourage new management at GRU to evaluate the adoption of a more formalized process to establish both transparency, as well as a stronger working relationship between GRU and the City Commission, from the outset including considering the following:

- Re-Design the Content and Format of Information Provided to City Commission The City Commission and/or City staff should periodically review the reporting format and content of information provided by GRU, and ensure that the information is adequately keeping the City Commission informed of all topics relevant to the GRU's financial condition and overall sound management. In conjunction with new management, it is recommended that the City Commission use this as an opportunity to refresh the format and content of information it receives, which should also include a concise report on the key risks facing GRU and its customers.
- Consider Use of a Steering Committee on Complex Projects or Negotiations In large, complex projects, it is common for an entity to create a quasi "Steering Committee" to interface with the entity's governing body, and to provide broad executive oversight. A key responsibility of a Steering Committee is to review overall project status, performance, budget expenditures and forecast, and to ensure key stakeholders are aligned and have a common understanding of the projects challenges and progress. In addition, a Steering Committee may have a number of other responsibilities including reviewing and approving recommended changes, ensuring the efficient allocation of resources, organizational readiness, and resolving significant issues, risks and / or critical roadblocks, among others.

In addition, while an open meeting format can sometimes discourage open discussion and debate regarding complex and/or controversial issues, it is incumbent upon the City Commission to foster open, and even free-ranging, discussions when benefits of disagreement and dissent may lead to achieving better decisions.

4. GRU Needs to Adopt a More Formalized and Rigorous Risk Management Process

Throughout this Report we address GRU's failure to effectively assess, mitigate and communicate the many risks that were inherent to a biomass-fueled generation option and the PPA, and that were known from the outset. While risk management efforts can be complex, as well as cumbersome, we encourage GRU to undertake an evaluation process to identify a more formal process for identifying, evaluating (and quantifying) the potential impact of key risks in its business, as well as its contracts, including a more standardized process for recording and communicating such information to management and the City Commission, where warranted.

The objective of a risk management and defined risk management operating procedures are to identify potential risks, document mitigation strategies, and monitor those risks and take action as needed (i.e., to manage all risks that could potentially impact the budgeted cost, schedule, scope or performance of a project or under a contract).

5. The City Commission should Consider Revising its Governance Structure

The City Commission has the authority, and the duty, to provide for governance of GRU. However, the City Commission should consider revising its governance structure through the creation of an advisory committee with many of the attributes of an Independent Board.

The issue of the appropriate board and governance structure for a municipal utility has been investigated by many different organizations including the APPA, independent entities like the Gainesville Area Chamber of Commerce, and for specific clients, even Navigant. There are many forms of governance available to the City including:

- Direct Governance by the Commission or City Council (Gainesville's current state)
- Governance by the Commission or City Council with Support of an Advisory Council or Committee
- Governance by an Independent Board (Appointed by the City Commission or City Council)

The expectations of good corporate governance have clearly changed over the past decade, and the risks are significantly greater for an organization and its governing body that fails to employ policies and procedures designed to safeguard the entity's assets. Entities of all types, including municipally owned utilities, have come under greater scrutiny to demonstrate their public accountability.

In addition, as capital investments and requirements expand to replace aging assets, as well as adopt new technologies, capital markets and their rating criteria and guidelines play an even more important role in how a utility is being governed and managed. Both the quality of a utility's senior management and its governing body are key considerations in the analytical process engaged by public market

ratings agencies to evaluate the credit quality of public power issuers. For example, Moody's Investor Services cites it belief that:

"...strong independent boards with industry expertise as a condition of service on the board membership are the soundest governance structure" and, that they "generally look for governing boards that minimize political interference in the professional management of the utility operations and establish sound rate policies, risk management programs, strategic plans and general fund transfer policies."<sup>19</sup>

While various options have been proposed regarding the governance of GRU, Navigant would suggest that it may be more practical to reconstitute the existing Gainesville Electric Advisory Committee (GEAC) to serve as a utility advisory board, using some of the characteristics described in relation to the proposed independent boards. By taking this approach, the City Commission might be able to more quickly establish a qualified and effective advisory board that can focus its time on the issues of greatest importance to the City Commission, be able to become better informed as to the complexity of GRU's operations, and provide an avenue for citizen input into the decision process. This approach would also enable the City Commission to retain its full rights as the governing body of GRU.

<sup>&</sup>lt;sup>19</sup> Moody's U.S. Public Finance Rating Methodology, U.S. Public Power Electric Utilities, 2008

#### **II.** Scope of Work and Objectives

#### A. Introduction

The Gainesville Regional Utilities ("GRU") is a municipal utility system owned and operated by the City of Gainesville ("City") in Alachua County, Florida. GRU is comprised of five separate enterprises including an Electric System (generation, transmission, and distribution), Water System (water production and distribution), Wastewater System (wastewater collection and treatment), Gas System (natural gas distribution), and Telecommunication System (GRUCom).

GRU's Electric System is one of 35 municipally owned electric utilities, and the 5<sup>th</sup> largest in the State of Florida ("State") (and one of only 15 municipal utilities in Florida with electric generation).<sup>20</sup> It serves over 54 square miles and a diverse customer base encompassing the City and surrounding unincorporated areas, and the County of Alachua ("County"), serving approximately 93,000 retail customers (~74,164 residential and 8,912 commercial customers).<sup>21</sup>

On April 29, 2009, GRU's then General Manager (Robert E. Hunzinger) executed a long-term (30-year) Power Purchase Agreement ("PPA") for all of the energy to be produced from a 100 MW biomass-fired power production facility to be built, owned and maintained by the Gainesville Renewable Energy Center ("GREC").<sup>22</sup> The PPA was signed by James S. Gordon, as President of GREC, and Mr. Hunzinger, as General Manager for GRU. The PPA was later approved by the City Commission on May 7, 2009.<sup>23</sup> Mr. Hunzinger was quoted saying that the contract "would probably be the biggest commitment for GRU and the City since Deerhaven 2" (the City's coal-fired electrical generation unit built in 1981).<sup>24</sup> It was further noted in the minutes to the City Commission's May 2009 meeting that:

While the long term economics for the facility are favorable compared to conventional alternatives, the biomass plant may increase the fuel adjustment for the first few years of operation, depending on the outcome of climate change legislation, changes in the cost of the fossil fuels that will be avoided by the biomass plant, third-party contractual unit participation and the completion timeframe of the facility...<sup>25</sup>

At the time, GRU personnel estimated that the potential value (i.e., net present value) to the City over the 30-year term of the PPA would range from \$212 million to \$492 million, but that the value depended on "various sensitivities, such as project completion date, implementation of renewable portfolio standard and/or carbon constraint legislation..."<sup>26</sup>

<sup>&</sup>lt;sup>20</sup> American Public Power Association, 2014-15 Annual Directory and Statistical Report

<sup>&</sup>lt;sup>21</sup> www.gru.com/AboutGRU.aspx

<sup>&</sup>lt;sup>22</sup> Power Purchase Agreement for the Supply of Dependable Capacity, Energy and Environmental Attributes from a Biomass-Fired Power Production Facility, by and between, Gainesville Renewable Energy Center, LLC and The City of Gainesville, Florida d/b/a Gainesville Regional Utilities, dated as of April 29, 2009

<sup>&</sup>lt;sup>23</sup> City of Gainesville, City Commission Meeting Minutes, May 07, 2009

<sup>&</sup>lt;sup>24</sup> Transcript of Public Hearing, City of Gainesville City Commission in RE: Evaluation of Biomass-Fueled Generation Facility Proposals, May 7, 2009

<sup>&</sup>lt;sup>25</sup> Ibid

<sup>&</sup>lt;sup>26</sup> Ibid
In addition, GRU estimated that the monthly fuel adjustment impact on a typical GRU customer / ratepayer (1000 kwh/month) could range from \$4 to \$8 in 2014, "assuming approximately one-half contractual third party participation" (i.e., GRU's ability to resell up to 50% of the 100 MW of generated electricity to someone else at market rates).<sup>27</sup>

However, from inception of the proposed biomass-fueled facility through to the present, questions have been raised by citizens, the City's elected officials, and other interested parties regarding the GREC facility and the PPA, and their ultimate impact on the Gainesville community and GRU's ratepayers. Many of the questions and concerns were motivated and/or influenced by concerns for GRU's actual future electric needs, the perceived lack of transparency in the contract and contract negotiating process, and the subsequent financial performance and condition of GRU including concerns related to increases in GRU's long-term debt and utility rates.

In addition, in October 2013 following questions from a City Commissioner regarding a reclaimed water line to the City of Alachua and its connection to the PPA, the existence of an Equitable Adjustment for a Change of Law to the PPA executed on March 16, 2011 ("Equitable Adjustment") was brought to the attention of the City Commission.<sup>28</sup> However, despite apparent discussions regarding the proposed change that led to the Equitable Adjustment since 2009, its existence had remained largely unknown to the City Commission and other City staff.

Under the Equitable Adjustment, GRU and GREC agreed that the Florida Department of Environmental Protection ("FDEP") and the United States Environmental Protection Agency ("EPA") had "imposed changes upon the design and operation of the [biomass] Facility" that increased the actual costs to GREC in generating and selling power from the facility.<sup>29</sup> After review and queries by the City Commission, it was estimated that the Equitable Adjustment was "expected to result in increased costs to GRU under the PPA of approximately \$3.5 million annually or \$105 million over the 30 year contract term" and that the "construction of the reclaimed water pipeline added a one-time cost of approximately \$1.1 million."<sup>30</sup>

The revelation regarding the existence of the perceived unauthorized Equitable Adjustment, as well as the realization that many of the projected benefits of the biomass facility and long-term PPA seemed much less likely, raised further concerns regarding the potential existence of other hidden risks that may have occurred during the tenure of the former General Manager. These heightened concerns ultimately led to requests by concerned citizens for an independent assessment and evaluation of the GREC PPA and the circumstances surrounding its negotiation and approval.

<sup>&</sup>lt;sup>27</sup> Ibid

<sup>&</sup>lt;sup>28</sup> Equitable Adjustment for Change of Law, executed by James S. Gordon as President of GREC and Jennifer L. Hunt, Chief Financial Officer, on behalf of Robert E. Hunzinger, General Manager

<sup>&</sup>lt;sup>29</sup> Equitable Adjustment for Change of Law, executed by James S. Gordon as President of GREC and Jennifer L. Hunt, Chief Financial Officer, on behalf of Robert E. Hunzinger, General Manager

<sup>&</sup>lt;sup>30</sup> City of Gainesville Request for Proposals for External Investigative Review of Gainesville Regional Utilities, Section I – Request for Proposal Overview & Proposal Procedures, Subsection A. Introduction / Background, dated April 10, 2014

The City Commission subsequently voted to engage an appropriate firm to perform an independent investigation and review of the circumstances and decision-making surrounding the RFP process and execution of the PPA, as well as subsequent agreements and amendments. Navigant was subsequently selected through an RFP process to perform the independent analysis and evaluation, with an engagement letter executed between the parties to that effect on October 17, 2014.

### B. Scope of Work and Objectives

Navigant entered into an agreement with the City on October 17, 2014 to conduct an independent evaluation and assessment of the questions and concerns raised regarding GRU's negotiation and execution of the PPA, as well as the subsequent Equitable Adjustment in 2011, including a review of the decision-making processes by both GRU and the City Commission. The objectives outlined by the City Commission include a final written report focused on:

- Recommendations of institutional controls that can be implemented that would help avoid the management discrepancies of the past and help strengthen the working relationship between GRU management and the City Commission; and
- Opportunities for financial and operational benefit to GRU related, but not limited to, the Gainesville Renewable Energy Center (GREC) power purchase agreement.

In addition, the minimum requirements for the Investigative Review included:

- A review of relevant agreements, documents, financial records, memos, emails and any other materials associated with the GREC power purchase agreement (PPA) and any subsequent amendments or agreements;
- A review of activities and decisions involving the GREC PPA and subsequent amendments or agreements, including the "Equitable Adjustment Agreement for Change of Law," with a focus on policy, legal and administrative standards and compliance;
- A determination as to whether any financial recoveries may be available for GRU;
- Preparation of data in a manner consistent with legal practices necessary for pursuit of legal action, if appropriate, against any parties to the GREC PPA and subsequent agreements or individuals and entities involved with the negotiation, execution and implementation of the GREC PPA and subsequent agreements; and
- A review of GRU policies, procedures and practices with respect to expenditure contracting and other compliance issues that may include recommendations to strengthen the working relationship between GRU management and the City Commission and to improve oversight going forward.

The City Commission further requested the services include a review of the "flow of financial information provided to the City Commission, especially as it related to the Equitable Adjustment for Change of Law."<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> City of Gainesville Request for Proposals for External Investigative Review of Gainesville Regional Utilities, Section II – Scope of Services, Subsection A. Intent, and B. Minimum Requirements, dated April 10, 2014

### C. The Investigative Process

Navigant Consulting (NYSE: NCI) is an international firm of advisors and consultants with more than 3,000 employees located in nearly 50 cities in North America, Europe and Asia, including two offices in Florida (Miami and Tampa). Navigant specializes in assisting major corporations, their Boards of Directors, and inside and outside counsel in conducting high-profile consulting engagements including forensic investigations into management impropriety and/or misconduct, fraud and other white collar crime matters. Navigant is also a leading management consulting firm in the energy sector and works with many of the leading electric utility and power enterprises in the country.

Navigant's efforts were performed by a cross-disciplinary team of consultants that included significant investigative and electronic-discovery experience, and extensive electric utility and public power experience. Navigant professionals included consultants with former Big 4 accounting firm experience, Certified Fraud Examiners, an Accredited Senior Appraiser (business valuation), information technology and computer software solutions experts, and specialists in the identification and retrieval of electronic information from computer systems and networks, as well as two consultants with over 35 years of experience working in the electric utility industry including utility operations, power purchase and resource planning, organizational change, governance issues and asset evaluations.

While there is no definitive legal guidance precisely prescribing the manner in which an investigation of this nature should be performed in all cases, such investigations generally must be conducted with reasonable care, independence, and good faith.<sup>32</sup> In determining whether an investigation meets these standards, consideration should be given, among other things, to: (i) the investigation's involvement of capable professionals to assist in the investigation; (ii) the independence and level of expertise of the investigative team members, (iii) the investigation's review of documents and electronic information; and (iv) the investigation's conduct of witness interviews.<sup>33</sup>

### D. Summary of Work Performed

Upon execution of the contract, Navigant began working with City and GRU personnel to identify, collect and organize documents and data relevant to the Investigative Review, as well as conducting information gathering meetings with City/GRU personnel, elected officials and certain citizens. Throughout our efforts, Navigant has been guided by (i) the scope of work as defined on behalf of the City Commission in RFP No. CAUD1140037-DH for the External Investigative Review of Gainesville Regional Utilities; (ii) issues raised in individual discussions with City Commissioners and certain citizens, and iii) guidance provided by the City Commission and City Auditor in providing oversight during the investigative process.

Navigant's objectives also focused on identifying questionable and/or potentially inappropriate behavior or actions, if any, and to assess if the basis of communication between GRU and the City Commission was adequate in light of the potential challenges faced in the development of the biomass-fueled generation facility. In addition to providing transparency and accountability into the reasons for

<sup>&</sup>lt;sup>32</sup> See e.g., Zapata Corp. v. Maldonado, 430 A.2d 779 (Del. 1981)

<sup>&</sup>lt;sup>33</sup> See e.g., Zapata Corp. v. Maldonado, 430 A.2d 779 (Del. 1981); Carlton Investments, 1997 WL 305829 at \*10-11; Kaplan, 499 A.2d at 1188-92

certain terms and/or changes to the PPA, Navigant's Investigative Review is expected to identify areas where additional performance measures and/or controls may be warranted, as well as highlight either City or GRU operating practices, procedures or governance rules that may need to be strengthened.

Navigant's role was to apply financial, accounting, auditing, and electric utility industry expertise and independence to the design and execution of the Investigative Review to meet the City's objectives as outlined above. However, given the breadth of the defined Services, Navigant approached the engagement with the objective of striking an appropriate balance between obtaining adequate information to reach an informed conclusion and avoiding the imposition of excessive burden, an unacceptable timeframe, and undue expense upon the City and GRU.

1. Overview of Work Steps

Navigant's initial efforts included the identification, request and preliminary review of information including an assessment of the organization and availability of information regarding the PPA, the Equitable Adjustment for Change of Law, and GRU and City general business policies, procedures and controls, including the purchasing function, as well as any changes, modifications or additions over time. Navigant also reviewed public articles and opinion pieces related to the development of the GREC biomass facility, public filings in relation to GREC's Determination of Need before the Florida PSC, and public filings made in relation to the Gainesville Citizen's Care ("GCC") lawsuit. Navigant's efforts closely followed the proposed approach and schedule for scope of work as outlined in Navigant's proposal to the City, which included the following:



### Task 1–Project Initiation

Consistent with Navigant's proposed approach and scope of work, at the outset of our efforts we met with a number of City/GRU staff, elected officials and citizens to gain an understanding of the issues to be addressed, the scope of services, and proposed coordination of our efforts. The primary focus of these meetings was to ensure our understanding of the key objectives and issues to be evaluated and analyzed during the Investigative Review. Additionally, various meetings were held with senior City/GRU information technology personnel and others concerning the location and extent of electronically-stored information (ESI) that was available and the extent of efforts that would be required to identify, preserve and collect such information for review.

### Task 2–Data Collection and Organization

As with many engagements Navigant undertakes, relevant information for our evaluation and analysis was gathered from a variety of sources. The breadth of our efforts encompassed the identification, preservation and recovery of potentially relevant information, including electronic records, with regard to the biomass industry, the City's initial RFI and RFP, the PPA negotiations and execution with GREC, and subsequent amendments to the PPA. We had access to, and have reviewed, information from numerous systems and data repositories within the City and GRU, information provided by citizens, and information obtained through access to outside data archives and repositories, including:

- City charters, resolutions, policies and procedures;
- City and GRU organizational charts, governance processes, and reporting requirements and/or practices during the relevant period;
- Documents related to the formation of GRU and its relationship with the City;
- Documents and information obtained by the City Attorney in relation to the Gainesville Citizen's Care lawsuit, the City's arbitration with GREC, and the City Attorney's investigation into the Equitable Adjustment for Change of Law to the PPA;
- Other memoranda, documents, and e-mails, previously collected by GRU and/or City personnel, including in response to public records requests;
- GRU documents related to the GREC contract (e.g., business cases, analyses, designs, cost estimates, contracts, revisions, and communications with the City, and with GREC, etc.);
- Listing of GRU and City key personnel, and areas of responsibility, involved in planning, acquisition and contract negotiations, and their relevant electronic or hard copy files; and
- Listing of key personnel in communication with the City concerning the contract
- E-mails of key personnel previously identified and collected by the GRU/City IT Department.

Other relevant electronic data was collected by Navigant in coordination with personnel from the City/GRU IT Department. A summary of the ESI obtained is described below.

### Task 3—Investigative Review of Chronology and Timeline

Navigant analyzed the collected documents to develop a detailed timeline/chronology related to the City's decision to pursue biomass-fueled electric generation and the GREC project from inception through the signing of the contracts. Governance and policies related to the authority of the City and GRU personnel related to procurement and contract negotiations were further identified and evaluated relative to the actions taken by the City, GRU and GREC during the PPA negotiations, as well as with

regard to subsequent amendments. Navigant's investigative and evaluative efforts are further summarized below:

- Review of relevant information to gain an understanding into the history of GRU and GRU's business and organization, and the history of the biomass effort and the PPA;
- Identification and review of information regarding the defining characteristics of the 100 MW biomass-fueled generation facility and the PPA, the trends in the renewable energy landscape, and the development of other renewable energy projects for comparison;
- Review of internal audit and evaluative reports, memorandums and filings with the City Commission and the Florida PSC and other State agencies in relation to the GREC facility, including the Determination for Need and efforts to obtain site and air permits;
- Review and evaluation of GRU and City specific policies, procedures, business processes and management practices, especially in relation to the overall decision-making processes and controls inherent to GRU and the City in relation to the negotiation and execution of the PPA, as well as applicable changes to the PPA in the Equitable Adjustment for Change of Law;
- Evaluation of specific business practices and process flows including the RFP solicitation, contract negotiation, risk analysis and purchasing function, as well as the communication processes between GRU and the City; and
- Evaluation of information obtained during the course of our work for evidence of questionable or inappropriate behavior, and / or deficiencies in governance or management that may have had an impact on the ultimate terms and success of the contract.

### Task 4-GREC Project Development History Analysis

Navigant reviewed all information deemed relevant to the GREC project and PPA, and our scope of work, including the power supply market in Florida, the justifications used to move forward with the GREC project, and the changes over the time-period in question, including Change in Law implications. Navigant's efforts included, but were not necessarily limited to, the following:

- Review of GRU's original RFP and the subsequent proposals / responses;
- Review of GRU's binding RFP the top three candidates from the RFP including the key terms and provisions outlined in the RFP and the subsequent responses in relation to those terms;
- Review of the various presentations made to the City Commission, or in public meeting, regarding the expectations and proposed terms of the biomass contract;
- Review of the negotiation efforts, meetings and resulting notes and correspondence between GRU and GREC personnel;
- Review of the formal and informal communication process between GRU and City staff, as well as between GRU and the City Commission regarding the status of the contract negotiation and permitting processes; and
- Review and evaluation of the City Commission's discussions and motions with regard to the biomass contract.

In addition, based on Navigant's initial efforts, we identified various other areas that we believed warranted attention in relation to our efforts in this matter. As such, and with approval by the City Commission, the scope of our efforts was expanded to include a high-level assessment of the following:

<u>Analysis of the Impact of the Power Purchase Agreement on GRU Rates and Financial Condition</u> Pursuant to Navigant's analysis of the PPA, we performed a limited analysis of the impact of the PPA, and changes to the PPA, on GRU's electric rates relative to other factors including GRU's capital improvement program and the Solar-Feed-In-Tariff, among other areas. Navigant's efforts included, but were not necessarily limited to, the following:

- Consolidating and analyzing GRU's historical annual reports, financial statements, and rate schedules for the period 2007 – 2014;
- Reviewing and evaluating certain financial performance metrics published by the American Public Power Association (APPA), including areas where GRU may be performing better than comparable municipal utilities, as well as areas in which improvement may be needed;
- Interviewing various GRU employees regarding the general history of GRU's financial and accounting policies, procedures and practices, as well as efforts to procure additional bond financing and to track and evaluate GRU's financial performance and electric rates over time;
- Reviewing reports issued by various bond rating agencies (i.e., FitchRatings, Standard & Poor's, and Moody's) during the period, including each agency's analysis and assessment of GRU's financial condition, as well as the relative financial performance ratios and other metrics; and
- Performing a limited analysis of GRU's historical electric rates for residential customers through information provided by the Florida Municipal Power Agency (FMPA) and comparison to other regional providers of electric service.

### Evaluation of Cost/Benefit Modeling and Other Risk Management Efforts

In relation to Navigant's efforts to review GRU policies, procedures and practices with respect to expenditure contracting and other compliance issues, Navigant performed a more in-depth review of the cost/benefit modeling conducted by GRU in relation to the forecasted impact of the PPA, as well as other risk assessment, management and mitigation practices.

### Assessment of Current Outlook for Biomass in the United States

Navigant also coordinated with our Navigant Research team (who currently follows and reports on the biomass market and industry) to conduct a limited but focused assessment of the current outlook for biomass to provide context and perspective to the recommendations described in this Report.

### Task 5-Develop Recommendations and Present Report

Navigant has summarized its observations, findings and recommendations from the Investigative Review in this Report, including specific findings and recommendations related to:

- Opportunities for financial and operational benefit to GRU related to the GREC PPA; and
- Recommendations for changes in governance and institutional controls to enhance the working relationship between GRU management and the City Commission.
  - 2. Document and Electronic Information Review and Analysis

Navigant's efforts included the identification, preservation, and recovery of potentially relevant information in the form of existing and archived electronic records of GRU and the City including electronic data, files and media, for the period beginning January 1, 2007 through December 31, 2013.

The breadth of our efforts encompassed reviewing information from numerous systems and data repositories within the City and GRU including the identification, preservation and recovery of ESI from City/GRU Email archives, network repositories, and the City Attorney's case management system.

More specifically, our efforts identified and retrieved over 500,000 pages of information from, but not limited to, the following sources:

- City and GRU websites;
- Information filed with the Florida PSC;
- GRU file servers (i.e., shared directories) for information pertinent to the biomass project;
- Directories containing biomass related RFPs, contracts and applicable finance and accounting information;
- Record repositories in the case management system used by the City Attorney to manage information collected and produced in connection with various matters;
- Archived email of current and former GRU and City personnel and elected officials;
- Information available from external sources including the Florida Municipal Power Association (FMPA), American Public Power Association (APPA), and SNL financial; among others; and
- Information produced by Navigant Research, as well as prior reports, related to the renewable energy industry.



### **Identification**

As is our standard approach in investigative matters, Navigant's initial efforts included ascertaining the nature, form and extent of ESI available for review; the current and former personnel (i.e., custodians) of that information; and the implementation of efforts to preserve and collect the ESI for further review. Our discussions were primarily focused on information resident within the jointly managed E-mail systems for the City and GRU, electronic records located within the City Attorney's case management system, GRU and City files located on shared or private network repositories, and records potentially residing on computer hard drives of current and former personnel.

### Preservation

At various points in time, GRU and the City have disseminated instructions to preserve documents and information in relation to various aspects of the GREC PPA and biomass facility including most recently in relation to the approval of the special investigation by the City Commission for which Navigant was retained in connection with this Report.

A "Notice of Obligation to Preserve Evidence" was sent on January 2013 regarding the preservation of information related to the PPA, GREC, GRU and subsequent changes in ownership of GREC, obligating the preservation of evidence relating to the PPA. A subsequent Notice to Preserve Documents and Electronic Information was sent to Mr. Hunzinger on October 29, 2013 requesting the preservation of evidence relating to his involvement with the PPA including his involvement related to the Equitable Adjustment. In addition, a notice was sent by Kathy Viehe to all GRU employees on July 17, 2014

referencing the current investigation prohibiting the destruction of any records pertaining to GRU or City business including "Emails, Voicemails, Paper Copies, Handwritten Notes, Electronic Records."<sup>34</sup>

### Recovery

Through our efforts we identified various data stores that contained information potentially relevant to the investigation, including the following:

- E-mail on the GRU / City Exchange Server
- Laptop / Desktop Drives of Certain Custodians
- Network File Shares/User Files
- Historical E-mail Stores (PST files)
- Images of Former Employee Hard Drives
- EDMS (Electronic Data Management System) used by the City Attorney's office

At our request, we were provided with hard copy documents and files, including information provided by the City Commission, as well as documents provided from various departments within GRU and the City. Navigant also had full access to electronic records available from GRU and the City including archived emails of current and former GRU/City staff and elected officials. In total, we had access to over 650 Gigabytes (GB) of ESI, or approximately 65 million pages of potentially relevant information. We selected a significant portion of this information (i.e., approximately 300 GB) for further processing and review. Through a selective evaluation and search criteria, we identified in excess of 200,000 individual emails and user files (i.e., Word, Excel, .pdf) that were ultimately processed and reviewed in relation to our efforts.

The results of Navigant's efforts to identify, preserve and collect ESI have been adequately maintained consistent with acceptable practices for the collection and preservation of forensic evidence in matters such as these.

3. Interviews of Key Personnel

Throughout the course of the Investigative Review, we attempted to interview all those individuals who, to our knowledge, were likely to have significant information relevant to our evaluation and investigation. Given the duration of the biomass RFP and contract negotiation process, the time-elapsed, and significant turnover at GRU and among the City's elected officials since the execution of the PPA, there are a number of individuals we sought to interview that no longer had a relationship with GRU or the City. While we had no ability to compel them to speak to us, we felt it was to important seek their input and perspectives regarding the biomass project and PPA, as well as to help identify potentially relevant information, documents or electronic files that could provide additional insight during those periods.

During the course of our evaluation Navigant conducted over 70 hours of interviews and discussions with over 40 individuals including current and former GRU/City staff, elected officials and citizens of

<sup>&</sup>lt;sup>34</sup> Email from Baxley, Robin L. On Behalf of Viehe, Kathy E. to EveryoneGRU, Subject: Message from Interim GM Kathy Viehe Re: Public Records

Gainesville with an expressed interest in the outcome of the Investigative Review, as well as certain third-parties with information deemed relevant to our efforts.

### E. Limitations

Certain practical limitations existed as to the information available during the engagement. Although GRU and City were cooperative with our requests for information, we had no power to compel third parties, including former GRU or City employees, contractors, outside consultants or vendors to submit to interviews or otherwise provide information. In addition, differences may exist between information obtained through voluntary informal interviews of the type Navigant conducted in contrast to document requests and information that could be obtained under oath or by compulsory legal process. Moreover, particularly given the circumstances surrounding the public attention to this matter, some of the people we interviewed may have been motivated to describe events in a manner colored by self-interest or with the benefit of hindsight.

From our initial analysis, we recognized that there might not be a simple explanation for the questions and concerns raised regarding the PPA and the Equitable Adjustment. In addition, given the approximate seven-year period for the scope of our Services (2007 – 2013), requested information was not always available or reasonably accessible. Because of employee and elected official departures, in a number of cases there was not direct institutional knowledge still resident at GRU or the City with regard to some aspects and time-periods of the GREC PPA.

Information also was limited during this period by the lack of any coordinated effort by GRU or the City to maintain comprehensive records related to the biomass facility and the GREC PPA. As such, Navigant undertook significant effort to identify, collect and preserve information that would be relevant to our efforts. However, given the City and GRU's relatively decentralized process for maintaining records, we cannot guarantee that all relevant records responsive to our areas of inquiry were identified during the investigation.

Within these inherent limitations, we believe that our evaluation and assessment was extensive, careful, independent and impartial, and that the facts developed afford a reasonable foundation upon which to base the observations and findings set out in this Report.

### F. Gainesville City Commission Oversight

As the authority for GRU, the City Commission provided oversight and direction to Navigant's independent evaluation and investigation. Navigant was retained to work under the direction of the City Auditor, who serves as both an internal auditor and the City's inspector general, to conduct the Investigative Review. In addition to ensuring that a thorough and complete evaluation was conducted in accordance with the City Commission's objectives, the City Auditor and City Commission provided assurance that Navigant's efforts, and this Report, were not subject to any improper influence by GRU, the City or other outside parties.

Throughout the course of our work, Navigant has coordinated with, and made periodic reports to, the City Auditor regarding the status of our efforts. However, notwithstanding the input provided by the City Auditor and the City Commission, as well as terms of our engagement, they placed no restrictions

on the scope of the evaluation and Navigant has exercised its professional judgment regarding the scope, timing and nature of our work.

### G. Independence and Objectivity

At all times during the investigation, Navigant has remained independent of the parties in this matter including current and former employees of City, GRU, and GREC and any other persons with interest, involvement or who have raised questions or concerns over the subject of the Investigative Review. Prior to accepting the engagement, Navigant performed a check based on the names of the parties contained in the RFP to this matter and identified no circumstances or prior material relationships with City, GRU or GREC, or current or former management, boards or Gainesville City Commissioners, that would constitute a conflict of interest or that could have impaired our ability to provide independent, objective assistance.

Neither Navigant Consulting, Inc. nor Navigant Consulting (PI) LLC is a public accounting firm. Navigant did not audit any financial statements or perform any attest procedures in the course of this engagement, nor has Navigant provided any legal advice during the investigative review or within this Report. The scope of Navigant's services were not designed, nor should they be relied upon, to disclose financial statement errors, irregularities or financial statement disclosure deficiencies in the City's or GRU's financial statements.

Navigant's role in this project was that of a special independent investigator, which is different from that of an independent auditor. Auditors plan and perform audits to obtain reasonable assurance that financial statements are free from material misstatement, and that the financial statements are fairly presented in conformance with Generally Accepted Accounting Principles ("GAAP").<sup>35</sup> A special investigation, on the other hand is not defined by any concept of materiality or necessarily by GAAP, and is typically much broader and more in-depth in scope than an audit.

### H. Confidentiality of Investigative Material during the Investigation

Navigant understands that the City has contracted with Navigant to perform the investigative review as an independent inspector general performing certain functions otherwise performed by the City Auditor. Navigant further understands that the City has deemed that pursuant to Section 119.0713(2)(a), Florida Statutes, information received, produced, or derived from the investigation is confidential and exempt from Section 119.07(1), Florida Statutes and s. 24(a), Art. I of the State Constitution while the investigation is being conducted. As such, Navigant has complied with the City's request to maintain the confidentiality and exemption of the information received, produced or derived from the investigation until the report is complete.

In addition, Navigant understands that the final report is not a public record until the investigation is complete and the final report is issued to the City Commission. Navigant will comply with the City's request to treat the report as a public record only after the investigation is complete and the final report is issued to the City Commission.

<sup>&</sup>lt;sup>35</sup> AICPA Professional Standards (AU Section 110)

### III. Financial Overview of GRU and the Electric System

#### A. Introduction

Throughout our discussions with elected officials, City/GRU personnel and concerned citizens, as well as our review of numerous articles, letters and other information presented and/or discussed at various City Commission meetings, concerns over GRU's Electric System rates and the historical and potential future impact of the GREC PPA is of paramount importance. Citing significant increases in net utility assets, long-term debt and electric rates for GRU rate payers from 2005 to the present, questions have been raised as to the reasons for the observed increases and what portion of those increases are attributable to the GREC PPA.

### **B.** Scope of Work and Objectives

During the course of the Investigative Review, Navigant performed a high-level review of the financial performance and condition of GRU relative to certain of the issues and questions identified throughout the Report. This effort focused on the performance of GRU primarily during the seven-year period under investigation (2007 – 2013), as well as the current impact on GRU's electric rates since the GREC biomass facility has been operational. It also included an analysis of certain financial performance metrics in comparison to similar metrics at other municipal utilities. However, while our efforts were directed at understanding the various factors that may have contributed to the observed and questioned financial standing of GRU, our assessment relied heavily on information prepared and presented by GRU throughout its annual budgeting, forecasting and financial reporting processes. Our efforts did not address the reasonableness or reliability of this information, or whether it fairly represents the financial condition and outlook for the utility, which was considered outside the scope of our engagement.

### C. Summary Observations and Findings

While the costs associated with electrical power purchased pursuant to the GREC PPA have been highlighted in relation to concerns over GRU's financial condition and increasing Electric System rates; in reality, there were numerous factors that have contributed to GRU's increased cost of electricity and other utility services over the relevant time-period. A number of factors including changing customer demographics and electric usage, fossil fuel prices, and fiscal management policies at both GRU and the City, as well as the substantive cost of power purchased pursuant to the PPA, have all had an impact. These factors are discussed below and throughout the remainder of this Report.

- Prior to 2006, GRU's electric rates were consistent with average electric rates (per average 1,000 kWh customer) for comparable municipal utilities in Florida. However, over the period 2006 2009, as well as in 2013, GRU's electric rates increased significantly and are currently considered to be among the highest in the State of Florida.
- Likewise, various GRU financial performance measures (e.g., Debt-to-Total Assets Ratio) were more in line with comparable utilities in 2006 than at present, indicative of significant financial changes and a potentially deteriorating financing condition.

- Beginning around 2006, GRU undertook a substantial multi-year capital improvement program across GRU's service lines that significantly contributed to increases in its long-term debt, and debt service requirements, as well as increases in GRU's utility system rates, including the Electric System.
- GRU's capital improvement program also coincided with GRU's efforts to promote energy efficiency through demand-side management (DSM), development of a solar feed-in-tariff program, and the pursuit of a long-term supply of renewable energy through the GREC PPA.
- While a significant portion of GRU's rate increases resulted from general increases in the cost of fuel and other rising costs that similarly affected other electric utilities in Florida, GRU's electric rates increased by a larger degree, due in part to increasing debt-service requirements, operating expenses and GRU fund transfers to the City's General Fund.
- GRU's efforts to address its rising costs, as well as the City's, were exacerbated by a declining
  growth rate in its customer base, as well as a significant reduction in average energy use per
  customer in part a result of its DSM and energy conservation efforts.
- Throughout the period, GRU and the City also conducted frequent issuances and re-issuances of its bond debt to accommodate its capital program, as well as in an effort to take advantage of lower interest rates during periods of general economic downturn in the United States.
- However, most of GRU's experienced rate increases, including in its Electric System, occurred prior to impact from the PPA, which did not become operational until the end of 2013. Most of the rate increases resulted instead from general changes in customer demographics, market conditions, the substantive amount of capital improvements, increased debt and debt-service requirements, and the overall fiscal management practices and decisions of GRU and the City.
- In 2014, GRU realized a significant increase in its fuel adjustment charge due to the cost of
  electricity purchased from GREC through the PPA. However, in an effort to alleviate existing
  concerns over current electric rates, GRU restructured certain of its bond debt, as well as its rate
  structure. By deferring principal payments on its bonds, GRU was able to essentially reduce its
  base electric energy charge, which helped offset the increase in the fuel adjustment charge.
- While GRU's efforts may have reduced the first-year impact of the PPA, the debt- restructuring
  may only have forestalled the potential impact of the PPA, and could have a negative impact on
  GRU's ability to secure additional debt in the future. Based on current conditions and
  observations, GRU may need to increase electric rates again in the near future, especially if
  other austerity measures currently being considered and implemented by GRU (and the City)
  do not meet current objectives.
- Regardless of the changes in GRU's financial condition, GRU has been able to maintain its
  financial stability and high bond ratings with its associated bond agencies, albeit with some
  heightened concern with regard to GRU's ability to continue increasing utility rates to meet its
  obligations to the City, as well as its future debt-service requirements.

In hindsight, questions exist as to the prudence/reasonableness of the timing and the amount of the costs incurred relative to the planned development of additional generation capacity, as well as enhanced efforts to promote distributed generation of solar power and energy conservation measures. In addition, GRU's assessment of the combined potential impact of multiple variables like these was lacking, as was a more comprehensive risk management effort to identify and mitigate future scenarios that could, and in some cases did, negatively impact GRU's financial condition and its ratepayers.

#### D. Evaluation, Analysis and Observations

The City of Gainesville, Florida is the largest city and county seat of Alachua County in North-Central Florida. The City serves an area of approximately 63.1 square miles and has a population of approximately 124,976 (250,730 countywide) with approximately 57,576 households.<sup>36</sup> The City is a municipal corporation of the State of Florida, organized and existing under the laws of the State including the City's Charter, Chapter 90-394, Laws of Florida, 1990, as amended (the "Charter").

GRU is a combined utility system, owned and operated by the City, doing business as the Gainesville Regional Utilities. GRU consists of five separate utility functions including an Electric System, Water System, Wastewater System, Gas System, and GRUCom. Each system is accounted for internally as a separate enterprise fund but reported as a combined utility system for external financial reporting.

GRU's Electric System provides retail electric service to consumers in the Gainesville urban area, which includes the City and the surrounding unincorporated area. The Electric System and its generating capacity has continued to expand since its formation in 1912, and currently serves approximately 93,719 customers over 124.5 square miles including the entire City of Gainesville with the exception of the University of Florida campus, which is served primarily by Duke Energy.<sup>37</sup> Wholesale electric service is currently provided to one customer, the City of Alachua.

As of the most recent statistics available from the American Public Power Association (APPA) on public power utilities, GRU was ranked as one of the top 100 largest public power utilities in the United States by the number of electric customers served, megawatt-hour sales, and electric revenues.<sup>38</sup>

GRU's stated mission is to provide safe, reliable, competitively priced services in an environmentally

100 I	argest Public Power Utilities By Electric Custome	rs Serve	d, 2012
32	Lansing Board of Water & Light	MI	95,787
33	Gainesville Regional Utilities	FL	92,557
34	Eugene Water & Electric Board	OR	89,342
100 I	Largest Public Power Utilities by Electric Revenues	, 2012	
54	Public Utility District No. 1 of Cowlitz County	WA	\$240,145
55	Gainesville Regional Utilities	FL	\$236,814
56	Eugene Water & Electric Board	OR	\$231,302
100 I	argest Public Power Utilities by Megawatt-hour S	ales, 20	12
79	Connecticut Municipal Electric Energy Coop.	CT	1,965,409
80	Gainesville Regional Utilities	FL	1,904,484
81	Virginia Municipal Electric Association No. 1	VA	1,869,811

responsible manner to enhance the quality of life in Gainesville and surrounding communities that it

37 Ibid

<sup>&</sup>lt;sup>36</sup> www.cityofgainesville.org/Community/AboutGainesville.aspx

<sup>&</sup>lt;sup>38</sup> American Public Power Association, 2014 – 15 Annual Directory & Statistical Report

serves.<sup>39</sup> Its stated long-term energy supply strategy is to "encourage cost effective energy conservation, renewable energy in combination with GRU owned generation, and purchased power while managing potential regulatory requirements."<sup>40</sup>

1. Management of GRU

GRU's daily operations are managed by the General Manager for Utilities, a position established by the City's governing Charter. In addition to the General Manager, the Electric System's executive team consists of four Assistant General Managers ("AGM") (i.e., Energy Supply, Energy Delivery, Water and Wastewater Systems, and Customer Support Services), the Chief Financial Officer and a Utilities Attorney. As of the date



of this Report, the applicable GRU executives include those shown in the adjacent chart, with several key positions currently filled by "interim" managers.<sup>41, 42</sup> During the period of energy supply resource planning and the negotiation of the GREC PPA, there was a fifth AGM responsible for Strategic Planning. This function has since been distributed among the remaining functional AGMs.

2. GRU Governance and Regulatory Oversight

The City and GRU are governed by the City Commission comprised of seven members (four members elected from four districts, two members at-large, and the Mayor). As of the date of this Report, the applicable City Commissioners and Mayor included the following:

Individual	Position	Term Expires
Edward B. Braddy	Mayor	May 2016
Todd Chase	Mayor Pro-Tem, Commissioner	May 2017
Craig Carter	Commissioner	May 2017
Yvonne Hinson-Rawls	Commissioner	May 2015
Lauren Poe	Commissioner	May 2015
Helen K. Warren	Commissioner	May 2017
Randolf M. Wells	Commissioner	May 2016

<sup>&</sup>lt;sup>39</sup> www.gru.com/AboutGRU/MissionValues.aspx

<sup>&</sup>lt;sup>40</sup> Financial Statements and Independent Auditors' Report, Gainesville Regional Utilities, Gainesville, Florida, September 30, 2014 and 2013, Management's Discussion and Analysis

<sup>&</sup>lt;sup>41</sup> Gainesville Regional Utilities, Presentation to Fitch Ratings, November 20, 2014

<sup>&</sup>lt;sup>42</sup> As of the date of this Report, GRU has a national search under way for a new General Manager being conducted by the Executive Search firm, Mycoff, Fry & Prouse, LLC. Once a new General Manager is selected, it is expected that the new General Manager will be responsible for conducting the search for a new CFO.

GRU is also subject to limited oversight by the Florida Public Service Commission (the "PSC"), which has regulatory authority over five (5) investor-owned electric companies, thirty-five (35) municipally owned electric utilities, and eighteen (18) rural electric cooperatives in Florida.<sup>43</sup> The Florida PSC's regulatory authority over municipally-owned electric utilities is limited to safety, rate structure, territorial boundaries, bulk power supply, operations, and planning. In addition, all major generating electric utilities in Florida, including GRU, are required to annually submit a Ten-Year Site Plan to the Florida PSC for review.<sup>44</sup> Among other things, the Ten-Year Site Plans contain projections of an electric utility's electric power needs, fuel requirements, and the general location of proposed power plant sites and major transmission facilities.

GRU is also subject to, and influenced by, regulations and guidance from the Florida legislature, which can have a significant impact on the direction and nature of the electric business in Florida.<sup>45</sup> In 2005, and again in 2009, the Florida Legislature considered, but did not adopt, a Renewable Portfolio Standard ("RPS") that, among other things, would have mandated electric utilities in Florida with electrical generation assets to source a certain amount or proportion of their electrical generation from renewable energy sources. Since that time, Florida has continued its efforts to promote energy efficiency and renewable energy sources of electrical generation but has yet to adopt a RPS.

3. GRU Operational and Financial Highlights

During the past ten years (2005 – 2014), GRU has faced significant challenges fostered by substantive changing electric customer demographics and usage trends, significant capital expenditures, increases in long-term debt, and the development of the biomass plant, as well as necessary increases in utility system rates across their customer base, including significant increases in its Electric System rates.

With revenues over \$400 million and capital assets exceeding \$2 billion in 2014, GRU is currently the fifth largest municipally run electric utility in Florida and one of the top 100 in the United States. A relative comparison to other large municipal utilities in Florida is shown in the adjacent

Summary of Key Financial Metrics o	f Comparable Mu	nicipally Owned I	Utilities in Florida	L
	GRU	JEA	LAK	OUC
	Sept 30, 2014	Sept 30, 2014	Sept 30, 2013	Sept 30, 2014
Net Capital Assets	\$ 2,196,230,910	\$ 6,219,620,000	\$ 678,435,164	\$ 2,354,626,000
Total Assets	2,644,550,355	8,437,027,000	918,265,921	3,243,557,000
Total Debt (Current & Long-Term)	\$ 1,990,563,436	\$ 5,569,386,000	\$ 482,962,385	\$ 1,632,673,000
Total Operating Revenues	\$ 405,894,614	\$ 1,861,881,000	\$ 302,055,713	\$ 879,985,000
Total Operating Expenses	340,246,921	1,446,782,000	250,336,345	747,928,000
Total Operating Income	\$ 65,647,693	\$ 415,099,000	\$ 51,719,368	\$ 132,057,000
Net Capital Assets / Total Assets	83%	74%	74%	73%
Total Debt / Total Assets	75%	66%	53%	50%
Total Operating Income Margin	16%	22%	17%	15%

table.<sup>46</sup> While GRU's operating margin is in line with other municipal utilities shown, its Debt-to-Total-Assets ratio is larger, which is further discussed below.

<sup>&</sup>lt;sup>43</sup> Facts and Figures of the Florida Utility Industry, Florida Public Service Commission, March 2014

<sup>&</sup>lt;sup>44</sup> Section 186.801, Florida Statutes (F.S)

<sup>&</sup>lt;sup>45</sup> Title XXVII, Chapter 366 – Public Utilities, Florida Statutes

<sup>&</sup>lt;sup>46</sup> Audited Financial Statements for GRU, Jacksonville Electric Authority (JEA), Orlando Utilities Commission (OUC), Lakeland Electric, for the period ended September 30, 2014 (2013 for LAK)

Sales of electricity and operating revenues have increased for GRU over the past ten years, with electricity sales increasing from approximately \$174 million in 2005 to over \$268 million in 2014, and corresponding increases in operating income from averaging approximately \$50 million to averaging over \$80 million. Select GRU financial data is presented in the table below for the 2005 – 2014 period:

Summary of GRU Electric Fund	Financial S	itatements	(000's) <sup>[A]</sup>								
Electric fund revenues:	2005	2006	2007	2008	2009	2010	2011	2012	2013		2014
Sales of electricity	\$174,066	\$207,024	\$206,553	\$238,596	\$249,762	\$262,531	\$250,057	\$ 230,806	\$ 229,034	\$	268,734
Total electric fund revenue	\$178,950	\$210,428	\$209,656	\$251,859	\$266,796	\$272,350	\$264,965	\$ 249,154	\$ 249,411	\$	280,482
Electric fund expenses:								Percent Chang	e (2005 - 2014)		57%
Total electric fund expenses	\$132,258	\$162,604	\$152,931	\$184,641	\$188,368	\$184,175	\$172,601	\$ 160,570	\$ 167,524	\$	203,506
Electric fund operating income	\$ 46,692	\$ 47,824	\$ 56,725	\$ 67,219	\$ 78,428	\$ 88,175	\$ 92,364	\$ 88,585	\$ 81,887	\$	76,976
		3-Yr. Avg.	\$ 50,414		← Perc	cent Change - €	54%	•	3-Yr. Avg.	\$	82,482
Assets:											
Net capital assets	n/a	\$443,101	\$497,197	\$600,116	\$688,192	\$694,064	\$740,594	\$ 749,559	\$ 734,835	\$1	,706,846
								Percent Chang	e (2006 - 2014)		285%
Liabilities:											
Total long term debt	n/a	\$334,817	\$324,237	\$469,061	\$576,648	\$584,962	\$ 567,959	\$ 624,651	\$ 519,418	\$1	.,572,547
								Percent Chang	e (2006 - 2014)		370%
Source:											
[A] Audited financial statements for the f	fiscal years er	ided Septemb	er 30, 2006 - 2	014, Schedul	e of Net Reve	nues in Acco	rdance with B	ond Resolution	ı - Electric Utility	7 Sys	stem

The Electric System also has had substantial increases in net capital assets and long-term debt. Net capital assets increased approximately 285% from 2006 to 2014, with corresponding increases in long-term debt by approximately 370% (i.e., from \$334 million to over \$1.5 billion). However, the substantial increase noted in 2014 resulted primarily from GRU's decision to treat GRU's obligations under the PPA (approximately \$977 million) as a capitalized lease beginning in 2014. The key drivers for these changes and the relative impact on various components of GRU's financial position are further discussed below.

### a) Electricity Generation

For the fiscal year-ending September 30, 2014, GRU's Electric System had a maximum net generating capacity of approximately 533 MW comprised of the generation assets listed on the adjacent table. The

current weighted-average age for GRU's existing electric generation facilities is approximately 26.5 years. GRU's all-time maximum peak load (demand) was 484 MW in 2007. Based on recent forecasts, GRU has adequate generating capacity to meet forecasted loads plus a 15% reserve margin through 2022 (assuming the scheduled retirement of Deerhaven – ST 1 in 2022).

Plant / Unit	Primary Fuel	In-Service	Expected Retirement	Age (Yrs)	Net Summary Capability (MW
J R Kelly - Combined Cycle 1	Natural Gas	2001	2051	14	112.0
Deerhaven - ST 2	Coal	1981	2031	34	232.0
Base Capacity					344.0
Deerhaven - ST 1	Natural Gas	1972	2022	43	75.0
Deerhaven - CT 3	Natural Gas	1996	2046	19	75.0
Intermediate Capacity					150.0
Deerhaven - CT 1	Natural Gas	1976	2026	39	17.5
Deerhaven - CT 2	Natural Gas	1976	2026	39	17.5
Peaking Capacity					35.0
South Energy Center	Natural Gas				4.1
			Total Capaci	ty	533.1

In addition, and as described, GRU has a long-term contract with GREC for the purchase of 100 MW of biomass-fueled generation that is not displayed in the table above.

As shown in the adjacent table, GRU has diversified its fuel mix over the past ten years from one heavily dependent/based on coal (60%) and natural gas (21%) to a more more-balanced portfolio consisting of coal (35%), natural gas (25%), biomass (37%) and a small amount of solar (2%) in 2014.<sup>47</sup>



### b) Electric Fund Revenues from Operations

For the fiscal year-ending September 30, 2014, GRU's Electric System served an average of 93,719 residential, industrial and commercial customers (representing a large percentage of the population of Alachua County), and accounted for 72.9% of the gross revenues and approximately 58.8% of the net revenues of GRU's combined systems. GRU's Electric System revenues, and reported earnings, over the past six years are summarized in the following table.

Electric fund revenues:	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Residential sales	\$ 47,697	\$ 49,709	\$ 50,908	\$ 52,465	\$ 52,918	\$ 59,477	\$ 58,320	\$ 52,431	\$ 52,468	\$ 50,326
General service and large power	36,886	38,684	45,895	50,931	49,651	59,114	66,035	65,947	67,097	63,285
Fuel adjustment	73,265	100,036	89,624	111,128	125,608	122,302	110,015	99 <i>,</i> 839	97,698	141,632
Other	16,219	18,595	20,126	24,072	21,585	21,638	15,688	12,588	11,770	13,491
Sales of electricity	\$174,066	\$207,024	\$206,553	\$238,596	\$249,762	\$262,531	\$250,057	\$230,806	\$229,034	\$268,734
Other electric revenue	\$ 2,693	\$ 2,615	\$ 3,878	\$ 3,872	\$ 3,270	\$ 14,446	\$ 13,522	\$ 12,854	\$ 13,259	\$ 14,026
Transfers from/(to) rate stabilization	(135)	(2,048)	(4,372)	6,532	11,055	(7,693)	(3,017)	1,069	3,239	(6,360
Interest/Investment income	2,326	2,838	3 <i>,</i> 597	2,860	2,709	3,067	4,403	4,426	3,878	4,082
Total electric fund revenue	\$178,950	\$210,428	\$209,656	\$251,859	\$266,796	\$272,350	\$264,965	\$249,154	\$249,411	\$280,482

GRU's operating revenues are funded through fees collected from customers through the various municipal services that it provides.<sup>48</sup> With regard to the Electric System, GRU's fees are basically composed of a *Customer Charge, Electric Energy Charge* and a *Fuel Adjustment Charge.* The *Customer Charge* is a fixed charge structured to recover GRU's costs whether or not any electricity is consumed by the customer. The *Electric Energy Charge* is based on the level of electricity use with rates based on a

<sup>47</sup> Ibid

<sup>&</sup>lt;sup>48</sup> Residential Rates – Electric, Gas, Water, & Wastewater, Effective October 1, 2014, with definitions

tiered structure. The *Fuel Adjustment Charge* recovers the cost of fuel used to generate electricity, and is primarily a pass-through cost. The GREC PPA costs are part of the fuel adjustment costs, which are passed through to customers.

While GRU's statement of operations portrays a relatively stable financial condition, general trends are more difficult to assess due to the impact of the fuel adjustments, as they are primarily pass-through charges to GRU's customers. Excluding fuel adjustments provides a better understanding of general trends in GRU's electricity sales relative to other components of Electric Fund revenues.

As is apparent from the adjacent chart, GRU sales of electricity and Electric Fund revenues generally



increased year-over-year during the past ten years until 2010 when revenue growth halted and essentially began to decline.

GRU's declining electricity sales resulted from various factors but are representative of larger demographic trends in Gainesville and the United States, as well as broader trends in electric usage per

customer due to DSM and other energy conservation measures over the past ten years. As is indicative in the adjacent chart, the size of GRU's residential customer base peaked in 2009 (after years of consistent growth), and declined in 2010 and 2011 before increasing again in 2012 and 2013. While the number of residential customers is expected to increase in the future, the expected rate of growth is currently expected to be significantly less in comparison to growth rates experienced by GRU in the past.



Another, and more significant, trend influencing GRU's decline in electricity sales resulted from a significant decline in the average electric usage per KWh for its residential customers, a trend that has been noted across the United States resulting, in part, from various energy efficiency, as well as conservation, initiatives over the past decade. In addition to its DSM measures, it is believed that GRU's continued escalation of electric rates throughout this period had a similar impact by encouraging more energy conservation because of the increasingly higher cost of electricity.



GRU's slowing (or declining) revenue growth from electricity sales, the largest component of GRU's revenues, is not only important to GRU's efforts to support its operating costs and debt-service requirements, but equally important to the City given its dependence on a substantial portion of GRU revenues to fund the City's General Fund (i.e., the City's budget), which is further described below.

c) Electric Fund Operating Costs

The table below	y summarizes GRI	I's opera	ating exi	penses duri	ing the	period 200	5 - 2014
The tuble below	Summarized Ora	JUOPEN	uning ch	cribeb duri	ing the	penioa 200	2011

Electric fund expenses:	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Chạ
Fuel expense	\$ 89,399	\$116,303	\$104,941	\$127,233	\$131,850	\$129,092	\$112,075	\$ 100,219	\$ 97,615	\$ 143,197	60%
	68%	72%	69%	69%	70%	70%	65%	62%	58%	70%	
Operation and maintenance	30,539	33,716	32,077	36,753	38,245	38,313	39,041	39,301	41,850	37,638	23%
	23%	21%	21%	20%	20%	21%	23%	24%	25%	18%	
Administrative and general	12,320	12,585	15,914	20,654	18,274	16,770	21,484	21,050	28,059	22,670	84%
	9%	8%	10%	11%	10%	9%	12%	13%	17%	11%	
Total electric fund expenses	\$132,258	\$162,604	\$152,931	\$184,641	\$188,368	\$184,175	\$172,601	\$ 160,570	\$ 167,524	\$ 203,506	54%

As evidenced above, GRU's Electric Fund expenses have increased significantly as well (or approximately 54%), and roughly in line with the approximate 57% increase in operating revenues – thereby supporting a relatively consistent operating margin. The largest component of GRU's operating expenses are the fuel expenses (described above), which, on average, have ranged from 58% - 72% of its overall operating costs, with most years falling in the 68 – 70% range. GRU's s next largest expense item is Operation and Maintenance expense (O&M), which has ranged from 20% – 25% of total Electric Fund expenses in most years, with the exception of 2014, when it was 18%.

Administrative and General (A&G) expenses increased by approximately 84% from 2005 to 2014 – even with a significant decline in expenses from 2013 (~\$28 million) to 2014 (~\$23 million). While fuel

expenses are more of a passthrough cost for GRU, O&M and A&G expenses are more controllable.

In contrast to the trend in GRU's operating revenues described above, GRU's electric fund expenses, with the exception of the fuel expense, generally increased over the last four years, the results of which have put a general downward pressure on GRU's operating margin.

While GRU's operating expenses during the period were influenced by a variety of



factors, the general trends noted above indicate that A&G expenses, as well as certain other controllable expenses, appear to have generally increased, or increased at a faster rate relative to the trend in operating revenues. In other words, while GRU's operating revenues peaked during the period and began to decline over the past four years, GRU's A&G expenses appear to have continued to increase (especially in 2013) until 2014, when they were reduced back to an amount in line with 2011 and 2012. This trend is also noted in the calculation of A&G expenses as a percent of revenue, which has generally increased over the past ten years. Part of this increase in A&G expenses appears to have been offset by a general decline in GRU's average cost of purchased power over the past five years, relative to the prior five years, until 2014 when the cost of purchased power under the GREC PPA resulted in a significant increase in fuel expenses.

As a company grows, GRU's A&G expenses, as a percentage of total revenue, are typically expected to decline. This is due to increased economies of scale and the ability to spread expenses over a larger base of operations. However, with notable exceptions, GRU experienced the opposite effect, suggesting that as the size of the organization increased, its efficiency decreased. GRU's A&G expenses in the period 2012 – 2014 increased by over 75% from the average expenses during the period 2005 – 2007.

d) Electric Fund Net Capital Assets

As previously described, around 2006 GRU undertook an significant capital improvement program marked primarily by its efforts to improve emissions from its Deerhaven 2 plant site (its primary generation asset), the development of an Eastside Operations Center to meet the then growing needs and technical demands of GRU, among other transmission and distribution upgrades across its various Systems. Many of these improvements and increase in capital assets were in relation to the Electric

System and reflected in the summary of Electric Fund assets and long term debt listed in the table below:

Assets:	2005	2006	2007	2008	2009	2010	2011		2012		2013	201	4
Net capital assets		\$443,101	\$497,197	\$600,116	\$688,192	\$694,064	\$740,594	\$	749,559	\$	734,835	\$1,706	,846
-								Pe	rcent Chang	e (20	06 - 2014)		285%
Liabilities:													
Total long term debt		\$334,817	\$324,237	\$469,061	\$576,648	\$584,962	\$567,959	\$	624,651	\$	519,418	\$ 1,572	2,547
								Pe	rcent Chang	e (20	06 - 2014)		370%

While net capital assets in GRU's Electric System have increased by more than 285% during the period, much of the increase resulted from the capitalization of the value of the long-term PPA and lease agreement with GREC in 2014. In addition, it is important to point out, while not displayed in the table above, that GRU's net capital assets had not increased appreciably in the years preceding the start of their capital improvement efforts in 2006. A summary of the key capital expenditures during the referenced period is provided in the table below noting the significant outlay required to improve emissions from GRU's coal-fired Deerhaven 2 electrical generation plant.

Improvement	Amount	Description
Deerhaven Plant	\$ 191,200,000	Cooling Tower Upgrades (DH1), Cooling Tower Refurbishment (DH2); Air
		Quality Control project (DH2); Boiler Roof Replacement (DH2); Simulator
		(DH2); Turbine Upgrades (DH2); Installation of Low Nox Burners (DH2);
		Catalyst Replacements (DH2); and High Temperature Reheater (DH2)
Electric Transmission and Distribution System	111,600,000	
Eastside Operations Center	72,400,000	
Shands Central Energy Plant/South Energy Center	52,700,000	
Gas Distribution Plant Expansion	20,600,000	
Wastewater Collection System	16,600,000	
Telecommunication Fiber Cable Expansion	16,400,000	Fiber and related infrastructure installation; Electronics upgrades
Other	43,500,000	Customer Information System; Financial Management Information System,
		Murphee Plant filter System Upgrade; JR Kelly; Chilled Water Piping -
		Innovation Square District
Total	\$ 525,000,000	

As of September 30, 2014, GRU's Electric System had approximately \$1.5 billion in outstanding long-term liabilities in relation to various bonds, senior notes, and revolving lines-of-credit.<sup>49</sup> As depicted

above, the Electric System's debt has increased from \$334 million in 2006 to over \$1.5 billion in 2014, which correlates with the amounts needed to support GRU's capital improvement program as described above, as well as the capitalized lease obligations associated with the GREC PPA starting in 2014, which represents approximately \$977,280,085 or 62% of those obligations.<sup>50</sup>

As would be expected, the increases in GRU's long-term debt was closely correlated with the increases in net



capital assets resulting from the capital improvement program described above. However, while not displayed on the adjacent chart, it is important to point out that GRU's Net Capital Assets had been relatively stable during the years preceding years, which may have been indicative of both the need for expansion, as well as the need for upgrade or repair.

### 4. General Fund Transfer

While GRU's combined statement of operations portrays a relatively strong utility, it generally does not reflect more fundamental changes, and challenges, in GRU's Systems and financial condition, particularly in the Electric System. Revenues derived from the Electric System together with revenues from the various other systems must be sufficient to meet their portion of the General Fund for the City's budget.

GRU transfers money monthly to the City's General Fund (i.e., the General Fund Transfer). For many years, the General Fund Transfer, made up primarily from a transfer from GRU, Property Taxes, Utility Taxes and Intergovernmental Revenues, has been the single largest component (75% - 80%) of the City's General Fund revenues. However, despite the declining electric sales and revenues described above, as well as increased Electric System costs, GRU's General Fund Transfer has continued to increase.

<sup>&</sup>lt;sup>49</sup> Audited financial statements for GRU for the fiscal year ended September 30, 2014

<sup>50</sup> Ibid



Noting concern for the long-term declining rate of revenue growth, the Gainesville City Manager, in his Five Year Financial Forecast (FY15-19), highlighted concern for General Fund revenues over the forecast period including the General Fund's reliance on GRU for almost a third of its total revenue, and the increasing financial and rate pressure facing GRU.<sup>51</sup> In his report, the City Manager highlighted the City's growing reliance on GRU as its primary revenue source. The City's General Revenue Fund during the same period has held relatively constant since 2011, as summarized in the table below:



The City Manager also cited concerns expressed by GRU that growth in transfers to the City's General Fund had "outstripped actual unit sales growth, and the potential for this pattern to continue could impair the financial status of the utility," (i.e., concerns about declining electric sales growth, while electric fund expenses had remained relatively constant or were continuing to increase.)<sup>52</sup>

52 Ibid

<sup>&</sup>lt;sup>51</sup> Five Year Financial Forecast FY15-19, City of Gainesville, Florida, January 27, 2014

These general concerns were further heightened given GRU's comparative position relative to other municipal power utilities in the U.S. Public Power Peer Study prepared by FitchRatings in June 2013. In

that study, GRU ranked second highest with regard to the amount of transfer to a general fund as a percentage of the utilities revenues.<sup>53</sup> An excerpt of that study is provided in the adjacent table.

GRU's expressed concerns with the General Fund Transfer underscore larger concerns and pushback from its ratepayers as a result of significant rate increases in its Electric System, among other

Fit U.S. Public Power Peer Study AA- R	chRatings y: Transfer as a % of FY12 ated Utilities	Revenues	
	Retail	Revenues	Transfer as a %
	Customers	(Millions)	of revenues
Tacoma Power, WA	169,012	387,833	10.9
GRU	92,461	354,624	10.2
Riverside Electric, CA	107,321	333,029	10.1
Garland Electric, TX	68,396	223,701	9.0
Austin Electric, TX	422,370	1,179,872	8.9
Bountiful Light & Power, UT	16,573	26,640	8.8
Dover Electric, DE	22,912	101,903	8.7
Tallahassee Electric, FL	108,317	312,722	8.6
Lakeland Electric, FL	120,771	290,337	8.3
Los Angeles Department of Water & Power	1,471,000	3,116,823	8.0
Georgetown Utility, TX	24,341	85,941	7.4
Ocala Combined Utility Funds, FL	50,498	165,759	6.5
Gallup Joint Utilities Fund, NM	10,515	30,950	6.3
Rochester Public Utilities, MN	49,990	142,602	5.8
Eugene Electric Board, OR	88,965	246,227	5.6
Winter Park Electric Services Fund, FL	14,261	46,034	5.5
Kissimmee Utility Authority, FL	64,007	173,082	5.3
Hydro-Quebec	4,107,426	12,228,000	5.3
Snohomish CO Public Utility District No. 1, WA	324,581	591,010	5.3
Jacksonville Beach Combined Utility Funds, FL	30,446	89,204	4.0

systems, which have resulted, in part, from the utility's significant expansion in capital improvements and substantive increase in debt service resulting from large-scale increases in long-term debt. Ongoing concerns by both GRU and the City resulted in the suspension of the pre-defined formula typically used until 2010. Although the formula was suspended in 2010 for a four-year period in lieu of a negotiated fixed dollar amount, GRU and the City also instituted a new formula in 2014 based on a fixed dollar amount in conjunction with certain austerity measures.

### 5. Electric Rates - Comparison to Other Regional Utilities

A limited analysis of GRU's electric rates for its residential customers during the period 2001 – 2014 was conducted to provide additional perspective in relation to various issues and questions addressed in this Report. The electric fees (i.e., per average 1,000 kWh of electricity consumed) being recovered by GRU have increased by over 66% since 2001. A summary of the average pricing for GRU residential customers using 1,000 kWh during the period 2001 – 2014 is included in the table below.

Historical Rates	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Gainesville	\$84.04	\$76.90	\$82.58	\$85.45	\$92.25	\$103.70	\$107.08	\$126.56	\$132.06	\$129.83	\$127.88	\$127.67	\$126.21	\$139.40
												Percent Change		66%

Electric service bill comparison data also was obtained from publicly available information from the Florida Municipal Power Association (FMPA) for various providers of electric service including municipal electric utilities, investor owned utilities (IOUs), and electric cooperatives, all of which are located within the Florida Reliability Coordinating Council ("FRCC") area.

<sup>53</sup> FitchRatings U.S. Public Power Peer Study, June 2013

Based on the limited comparison to selected utilities provided in the table below, GRU's historical residential power cost per 1,000 kWh has increased from being average cost provider in 2001 to the among the highest in 2014. Additional evaluation of GRU's historical residential electric rates is provided in Section *VII. Financial Impact of the PPA and Outlook for Biomass* of this Report.



6. Results of APPA Select Financial and Operating Ratios Analysis

In addition to evaluating the relative trends in operating costs of GRU's Electric System, Navigant performed a high-level comparison of GRU's Electric System to select financial and operating ratios of other public power systems as compiled and reported by the American Public Power Association ("APPA"). In performing our analysis, Navigant relied on data produced by the APPA covering the periods 2008 – 2013 for utilities in a similar size class (50,000 – 100,000 customers), by region (Southeast) and by power generation class (50 - 100%).

Several financial and operational performance metrics in relation to GRU's management of its controllable expenses and operations relative to other public utilities are discussed below. However, while comparative ratios can provide relative financial performance metrics that help put a utility's performance into perspective, it is important to note that they also can be limited due to significant operational and reporting differences between respondents, as well as the accuracy of responses.

#### Operational & Maintenance Expenses (O&M)

A review of the APPA ratio analysis results (discussed below) reveals that compared to other public utilities during this time period, GRU consistently had the highest Operational and Maintenance (O&M) expenses per consumer, and Administrative and General (A&G) expenses that have increased over the past seven years to be the highest among its peer groups.<sup>54</sup>

GRU's Electric System O&M expense per kWh sold has consistently been higher than its peers (i.e., utilities with 50,000 – 100,000 customers), and is approximately 6% higher than the average reported by public utilities in the Southeastern part of the U.S over this time period. In 2013, GRU's Electric System spent approximately \$0.09 per kWh sold, and approximately 5% more than its peers; and its costs have increased in periods despite the relative decline in customers and average kWh usage per customer.

#### <u>Administrative and General</u> <u>Expense (A&G)</u>

As described above, A&G expenses per retail customer represent a significant portion of GRU's controllable costs. The majority of these costs is attributable to employee wage and benefit expenses. The adjacent graph shows that GRU's Electric System A&G expenses have increased significantly over the time period and in 2013 were higher than the averages





<sup>54</sup> The financial statement information is based on GRU's audited financial statements for the periods listed, and APPA Selected Financial and Operating Ratios of Public Power Systems, for 2008 to 2012 Data

reported by its peers. On average, GRU's Electric System expends in excess of \$22 per customer more than its peers in the Southeastern part of the U.S. for costs classified as Administrative and General.

The APPA ratio analysis indicates that GRU's Electric System A&G expenses were relatively in line with (if not lower than) other public utilities in 2007 but that they have increased over time to be higher than other utilities on average in 2013. In 2013, GRU's Electric System incurred \$246 per customer in A&G expenses, the highest among its peer group and nearly 115% of the amount paid, on average, by other large public utilities (i.e., utilities with 50,000 to 100,000 customers).

### Debt to Total Assets

GRU's Electric System net utility plant has increased from over \$440 million in 2006 to over \$1.7 billion in 2014, a substantial portion of which (approximately 59%) was the capitalization of the PPA, equivalent to a sustained average growth rate in assets of approximately 8% per year. This increase in the size of GRU's Electric System assets also necessitated that GRU take on additional long-term debt.

One of the APPA metrics, comparing a utility's longterm debt to its total assets, indicates how much of a utility's infrastructure is funded by borrowing and how much it can be said to own outright. The adjacent graph depicts that GRU's figure, as high as 62% in 2009, 2010 and 2012, has been considerably above the average of other utilities during the past seven years. It is noteworthy, however, that GRU's percentage has remained fairly stable, while the average for other utilities in its peer group has



increased in recent years. The most recent metric is approximately on par with the average for other public utilities (i.e., utilities with 50,000 to 100,000 customers), but remains significantly higher than the average for its peers in the Southeastern part of the U.S.

7. Fiscal Controls and Financial Responsibility

Based on a preliminary review of GRU's budgeting, purchasing and capital improvement processes, GRU appears to have adequate processes in place in relation to their overall investment decisions with regard to new utility plant, but could have benefitted from a more rigorous evaluation of the financial impact of their capital decisions on GRU's ratepayers. Decisions about what construction projects to

undertake or how dollars are to be spent on capital projects do not appear to go through a validation process to determine the impact on rates, and limited project-to-project prioritization appears to occur.

8. Summary Observations and Findings

While investment requirements and costs have been high for GRU over the past decade, GRU and the City have been commended for their strong financial management, and have continued to maintain consistently strong credit ratings from its credit rating agencies – Moody's (Aa2), FitchRatings (AA-), and Standard & Poor's (AA).<sup>55</sup> In providing its rating, Moody's commented that "GRU's Utility System Revenue Bonds reflect its resilient service territory, sound risk and liquidity management, and the generally low business and operating risk profile that goes with a diverse revenue stream..." Among other things, Standard & Poor's also cited "management's oversight of its risk profile, budgeting to assure an adequate cushion of cash flow and liquidity, and the willingness of Gainesville commissioners to approve utility rate increases needed to achieve the budget goals.

However, as with any organization undergoing significant transformation, at times GRU appears to have lacked the necessary fiscal management policies and procedures, as well as risk management, to have effectively evaluated and assessed the potential impact of various decisions on its operating revenues and costs, as well as the underlying drivers and components of those revenues and costs. In addition, GRU also appears to have struggled with maintaining the requisite in-house expertise and leadership that are imperative for an organization of its size and complexity, including the current existence of "interim" management in five out of its eight key management positions.

Concerns also have been raised as to the challenges faced by GRU and the City into the future including the "competitive impact of sizable rate increases to cover energy costs for the biomass PPA, that GRU has "excess capacity and energy that it may not be able to sell into the market" and that it has "no debt service reserve." <sup>56</sup> FitchRatings also noted that "the addition of costly new excess capacity during a period of slower growth and moderate natural gas prices has put a serious strain on electric system financial results." <sup>57</sup>

<sup>&</sup>lt;sup>55</sup> Standard & Poor's Rating Services, Gainesville, Florida, Gainesville Regional Utilities; CP; Combined Utility, November 21, 2014, Moody's Investor Services, Gainesville (City of) FL Combined Utility Enterprise, November 25, 2014, FitchRatings, Gainesville Regional Utilities Bonds, December 3, 2014

<sup>&</sup>lt;sup>56</sup> Moody's Investor Services, Gainesville (City of) FL Combined Utility Enterprise, November 25, 2014

<sup>&</sup>lt;sup>57</sup> FitchRatings, Gainesville Regional Utilities Bonds, December 3, 2014

### IV. GRU's Decision to Pursue Biomass

### A. Introduction

A component of the services requested by Navigant was a review of the decision-making processes and relevant transactions occurring from the time the City Commission authorized GRU to issue an RFP to solicit biomass-fueled electrical generation in October 2007 until November 2013. Important to Navigant's efforts was developing an understanding of the criteria and ultimate basis for the decision to pursue the third-party development of a 100 MW biomass-fueled generation facility, and how the driving factors for that decision have impacted the current concerns regarding GRU and the GREC PPA.

The origins of the City's eventual long-term contract and relationship with GREC began with GRU's initial efforts to evaluate future power generation needs through the development of a long-range Integrated Resource Plan ("IRP"), which was initially presented to the City Commission in December 2003. Based on historical trends of increasing demand, the projected continued growth in electricity use, and the anticipated need to retire older electrical generating units, GRU projected a need for additional base load generation to meet Gainesville's future electric needs "probably not sooner than 2008 and no later than 2012."<sup>58</sup> The IRP's objectives were listed as follows:

- Assure Reliable Electrical Supplies
- Conserve Natural Resources
- Reduce Total Air Emissions
- Reduce Carbon Intensity
- Keep Electrical Costs Affordable
- Enhance the Local Economy

After a lengthy evaluation of GRU's IRP and long-term projected electrical generation needs (and recommendations), coupled with what is described as an extensive outreach program to solicit input from the Gainesville community, the City Commission decided to move away from coal as a base-load energy source and to incorporate more renewable energy in GRU's energy supply portfolio. In April 2006, the City Commission formally approved efforts to solicit input regarding the development of either a biomass-fueled, or integrated gasification combined cycle ("IGCC") facility, which ultimately led to the issuance of a Request for Letters of Interest ("RFI") in September 2006, and then to the development and issuance of a Request for Proposal ("RFP") in late 2007.

From the initial assessment and objectives established in GRU's IRP in 2003 through to the selection of Nacogdoches Power (as predecessor to GREC) in May 2008, GRU and the City, through numerous meetings, studies and avenues for public comment, worked to identify additional base load electricity generation alternatives consistent with their initial stated objectives....efforts that ultimately culminated with the agreement to procure 100 MWs of biomass fueled electricity from GREC under the GREC PPA in 2009.

<sup>&</sup>lt;sup>58</sup> Alternatives for Meeting Gainesville's Electric Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

Timeline of Key Events					
2002	Community discussions begin about long-term power supply needs				
2003	Gainesville Energy Advisory Committee sponsors six community workshops to gain customer input				
Dec 2003	GRU presents a resource planning study (i.e., IRP) to the City Commission				
Nov 2004	Alachua County Environmental Protection Advisory Committee (EPAC) provides an in- depth assessment of the GRU IRP				
Mar 2005	City Commission approves elements of a long term plan and development of conceptual designs using a mix of solid fuels including coal and up to 30 MW of biomass				
June 2005	City Commission adopts resolution endorsing U.S. Conference of Mayors' Climate Protection Agreement agreeing to reduce carbon emissions in line with Kyoto Protocol				
Sep 2005	EPAC submits review of GRU's proposal for a new coal-fired power plant				
Nov 2005	Governor of Florida issues Executive Order 05-241 calling for comprehensive energy plan for the state				
Nov 2005	City Commission votes to retain independent consultants to review the long term plan				
Nov 2005	City Mayor signs U.S. Mayors Climate Protection Agreement				
Mar 2006	ICF Consulting issues final report on its evaluation of the City's electricity supply needs				
Apr 2006	City Commission approves all source solicitation to initiate a conceptual design and pricing to meet GRU's energy needs				

A summarized timeline of events is provided in the table below:

### B. Scope of Work and Objectives

As with other areas of the Investigative Review, we have relied upon information gathered through discussions with GRU/City staff, elected officials and citizens, and information obtained regarding the City's future power needs including various presentations made by GRU to the City Commission, as well as other groups, City Commission meeting minutes, and various independent reports. We also reviewed numerous documents and electronic files prepared in relation to GRU's IRP and evaluation of its long-term energy supply needs, and the RFI and RFP development and solicitation processes.

### C. Summary Findings and Observations

- GRU's efforts to address long-range electrical planning began many years before the biomass RFP and execution of the PPA, and was an extensive undertaking that involved numerous individuals throughout GRU, the City, and various outside consultants and contractors.
- GRU's and the City's decisions were based on projections of future market conditions, which were subject to significant uncertainty including, among other factors, projected load growth, fossil fuel prices, generation asset retirements, and potential environmental regulations.

- GRU supported adding more coal-fired generation capacity with the ability/flexibility to utilize
  a significant amount of biomass, and was not supportive of a natural gas based option given
  concerns with the supply and volatility of natural gas prices.
- However, GRU's and the City's evaluation process coincided with a significant interest and concern over global warming, greenhouse gases, and the impact of fossil fuels on the climate, along with greater interest by the City Commission in renewable energy and conservation.
- The shifting priorities among primary drivers (i.e., the increased focus on environmental attributes) should have necessitated a new, or alternative, planning study rather than continuing to evaluate the current planning study (i.e., IRP) under a different set of priorities.
- The City Commission ultimately rejected GRU's recommended option of coal with up to 30 MW of biomass, as well as the supporting analysis from independent consultants, and chose to focus primarily on a 75 MW biomass option perceived to be more environmentally friendly.
- However, outside reviews conducted by ICF and GDS used to support the City Commission's decision were not intended, nor should they have been solely relied upon, to evaluate renewable energy options over more conventionally (fossil fuel) based forms of generation, as was the original scope of GRU's work.
- The apparent difference in opinions regarding different directions for GRU's generation planning was the result of a flawed process that ultimately resulted in the departure of GRU's long-time General Manager, Mr. Mike Kurtz.
- The shifting priorities and lack of focused evaluation of renewable energy, including biomassfueled generation options, should have necessitated a re-baselining to the primary driver's for GRU's perceived need for generation (especially given the passage of time since the preliminary IRP in 2003, and GRU's parallel focus on energy conservation and DSM).
- Further, while costs of production and customer rate impacts were evaluated (i.e., the objective to keep electrical costs affordable), they do not appear to have been significant drivers in the City Commission's ultimate decision to pursue a biomass-fueled generation option.

### D. Evaluation, Analysis and Observations

1. GRU's 2003 Integrated Resource Plan (IRP)

In December 2003, GRU presented a formal resource planning study (i.e., preliminary IRP) to the City Commission.<sup>59</sup> The preliminary IRP was the culmination of an extensive effort by GRU staff, consultants, and local experts to evaluate potential generation sources for the future.<sup>60</sup> The IRP highlighted GRU's projected electrical needs through 2022 and identified various concerns with regard

<sup>&</sup>lt;sup>59</sup> Alternatives for Meeting Gainesville's Electric Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

<sup>60</sup> Ibid

to GRU's increasing need for electricity and their aging fleet of generation assets, the perceived continuing escalation of natural gas prices, and overall concerns with ambient air quality, among others.

Various alternatives were evaluated including conserving electric usage through additional energy conservation (DSM) programs and increasing the supply of energy through new generation from renewable resources, coal, nuclear and distributed generation, as well as whether to "lease or own" or develop generation through a joint project. The IRP also highlighted four compelling factors that GRU felt necessitated near-term decisions with regard to its long-range planning. Those factors included:

- Domestic production of natural gas had leveled out and even decreased slightly;
- The natural gas market had become more volatile and natural gas prices had increased;
- The supply of natural gas to Gainesville was considered vulnerable to interruption due to the limited number of pipelines and lack of storage and production capacity in Florida; and
- Forecasts indicated that GRU would need additional generation capacity by 2010.<sup>61</sup>

GRU ultimately recommended that a solid (i.e., fossil) fuel capacity be included as a "key element of GRU's IRP" citing that "solid fuel options at Deerhaven enable the development of biomass capacity and more affordable emission reductions from Deerhaven 2."<sup>62</sup> The construction of a 220 MW solid fuel facility for coal, pet coke or up to 30 MW of biomass was deemed the best plan for reducing emissions, increasing the use of renewable energy, and was considered the least cost option considered.

a) GRU's Forecasted Need for Electricity

At the time, GRU had a net summer capability of approximately 612 MW available to meet its approximate 433 MW peak summer demand.<sup>63</sup> However, based on forecasts of electric demand, GRU

anticipated that it would only be able to meet its summer peak demand and maintain a desired 15% reserve margin through 2009. The adjacent chart supported GRU's contentions, and further projected a peak requirement (with a 15% reserve margin) of almost 800 MW by 2022 (base case forecast of summer peak demand).<sup>64</sup>



<sup>&</sup>lt;sup>61</sup> Alternatives for Meeting Gainesville's Electrical Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

<sup>64</sup> Preliminary Integrated Resource Plan to Meet Gainesville's Electrical Needs through 2022, Presentation to the Gainesville City Commission, by Gainesville Regional Utilities, December 15, 2003

<sup>&</sup>lt;sup>62</sup> Preliminary Integrated Resource Plan to Meet Gainesville's Electrical Needs through 2022, Presentation to the Gainesville City Commission, by Gainesville Regional Utilities, December 15, 2003

<sup>63</sup> Id

GRU's forecasted electrical demand was closely tied to the forecasted growth of GRU's electric customers. GRU's forecasts for the average number of residential and commercial customers similarly expected historical trends to continue with a steadily increasing number of customers.

The Energy Information Administration (EIA) forecasted a continued increase in demand across the U.S. in its 2005 Annual Energy Outlook.<sup>65</sup> Likewise, a report sponsored by the Florida Solar Energy

Center published in 2004 entitled Florida's Energy Future: Opportunities for Our Economy, Environment and Security, highlighted similar observations with Florida's growing population and electricity use including noting that "[Florida] has one of the nation's fastest growing populations, promoting rapid expansion of the energy industry..." along with supportive information displayed in the adjacent charts.66

The forecasted continued growth rate in GRU's and Florida's energy needs were not inconsistent with other reports and findings during the same time period. Florida's population was expected to continue to increase at a rate faster than most other states. In addition, the average energy usage per capita in Florida was already among the highest among states in the United States, and was expected to continue to outpace the United States on average, as well as most other states.





65 Energy Information Administration, Annual Energy Outlook 2005 with Projections to 2025, February 2005

<sup>66</sup> Florida's Energy Future: Opportunities for Our Economy, Environment and Security, Florida Solar Energy Center, dated January 16, 2004

In addition to GRU's projections regarding the increasing number of customers and the increasing average electricity usage per customer, GRU expressed its need to increase its base load generation to meet that demand. A commonly presented chart prepared by GRU during this time period is provided to the right showing GRU's forecasted peak demand and median load relative to its base, intermediate and peaking generation capacity.67

GRU's need for additional generation capacity was heavily influenced by the age of its generation fleet and the projected dates for retirement of some of its generation assets. The adjacent table lists the GRU generation assets as of 2005 with their in-service year and expected retirement year.68 As noted in the table, many of the J.R. Kelly (JRK) units had significant age, and that GRU was anticipating it would begin to retire in 2013. Based on



AGE OF IN-SERVICE GENERATING CAPACITY (as of 2005)									
Unit <u>Name</u>	In-Service <u>Year</u>	Retirement <u>Year</u>	Age <u>in Years</u>	Summer Net Capacity <u>(MW)</u>	Cumulative Capacity <u>(MW)</u>	Cumulative Capacity <u>(% of Total)</u>			
JRK FS7	1961	2013	44	23	23	4%			
JRK FS8	1965	2051	40	37	60	10%	CC1		
JRK GT1	1968	2018	37	14	74	12%			
JRK GT2	1968	2018	37	14	88	14%			
JRK GT3	1969	2019	36	14	102	17%			
Deerhaven 1	1972	2022	33	83	185	30%			
DH GT1	1976	2026	29	18	203	33%			
DH GT2	1976	2026	29	18	220	36%			
CR3	1977	2037	28	11	232	38%			
Deerhaven 2	1981	2031	24	228	460	75%			
DH GT3	1996	2046	9	75	535	88%			
JRK GT4	2001	2051	4	75	610	100%	CC1		
SWLF1	2003	2009	2	1 '	611	100%			
SWLF2	2003	2015	2	1	611	100%			
MegaWatt Weighted Average Age: 2005 23.84									

b) GRU's Concern for Base Load Generation and Aging Generation Assets

the adjacent table, in 2005 GRU expected to retire up to approximately 150 MW up through 2022.

<sup>&</sup>lt;sup>67</sup> Balancing Conservation, Renewable Energy, and Financial Strength, Presentation to the Gainesville City Commission, November 1, 2014

<sup>&</sup>lt;sup>68</sup> GRU Excel file, GRU Unit Age\_04-06-10

#### c) GRU's Concern for Forecasted Natural Gas Prices

Throughout the preliminary IRP, GRU expressed concern regarding Florida's growing reliance on natural gas stating that the "volatility and price of natural gas are of deep concern to GRU," citing that

the delivered price of natural gas had increased from approximately \$2.00/mmBTu to \$5.00/mmBTu over the previous five years.<sup>69</sup> GRU's forecasts for natural gas prices relative to the costs for other fuel types is shown in the adjacent chart.

GRU's sentiments regarding natural gas prices also were consistent with observations made by the Florida Public PSC in commenting on the 2004 Ten-Year Site Plans filed by required utilities. The Florida PSC cited that the use of natural gas for electricity production had increased significantly over the past decade from 12.7% in 1993 to 32% in 2004. It also noted that primary trends across the U.S. were to add natural gas fired generation as the predominant source of new capacity, but that past experience had shown that natural gas prices had been volatile.70

12.00 Natural Gas Avg. Annual Delivered Fuel **Price Forecasts** - Oil Fuel 10.00 Coal 8.00 Nuclear \$ / Million Btu 6.00 4.00 2.00 0.00 2010 2012 2020 2022 2024 990 2002 2006 2008 2014 2016 2018



The Florida PSC also expressed concerns

regarding fuel diversity in Florida and the increased reliance on natural-gas based generation, as well as the variation of natural gas price projections by utilities across Florida. Citing the importance of fuel

<sup>&</sup>lt;sup>69</sup> Alternatives for Meeting Gainesville's Electrical Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

<sup>&</sup>lt;sup>70</sup> A Review of Florida Electric Utility, 2004 Ten-Year Site Plans, Prepared by the Florida Public Service Commission, Division of Economic Regulation, December 2004
diversity, the Florida PSC commented that when electric utilities generate electricity using a diverse variety of fuels (e.g., natural gas, coal, uranium, oil, biomass, and methane) it is generally viewed as beneficial because fuel diversity is associated with increased electric reliability and reduced production costs, but that the outlook for fuel diversity in Florida in 2004 was uncertain.<sup>71</sup>

As a result of its concerns, the Florida PSC recommended in 2004 that Florida's utilities explore the feasibility of adding solid fuel generation as a part of future capacity additions, and it identified various utilities in Florida that were considering adding coal-fired generation alternatives in their planned resource additions, which included GRU, as well as Florida Power & Light, Jacksonville Electric Association and Seminole Electric Cooperative.<sup>72</sup>

In 2005, the EIA projected that more than 60 percent of new capacity additions would be natural-gasfired combined cycle, combustion turbine, or distributed generation technologies.<sup>73</sup> However, the EIA also believed as natural gas prices rose, that new coal-fired capacity would become increasingly competitive and account for nearly one-third of the capacity expansion, noting that the least expensive technology options would likely be the choices for new generation capacity. About 5 percent of the projected capacity expansion was expected to come from new renewable generating units.

2. GRU's and the City's Continued Evaluation of the Long-Term Energy Supply Plan

Throughout 2004, GRU conducted numerous community meetings held as part of an outreach program and benchmarking study to evaluate the adequacy of GRU's plans, as well as its programs for DSM and renewable energy.74 GRU understood that the City Commission was focused not only on the financial strength of GRU but that it was important for GRU to be a leader in promoting energy efficiency and the use of renewable resources.<sup>75</sup> As such, much of GRU's effort appeared to be focused on benchmarking GRU to other electric utilities and on determining the appropriate balance between



conservation, renewable energy, and financial strength.<sup>76</sup>

<sup>71</sup> Ibid

<sup>72</sup> Ibid

<sup>&</sup>lt;sup>73</sup> Annual Energy Outlook 2005 (with Projections to 2025), Energy Information Administration, February 2005.

<sup>&</sup>lt;sup>74</sup> At the April 19, 2004 City Commission Workshop, the Gainesville City Commission suggested that staff conduct a benchmarking study.

<sup>&</sup>lt;sup>75</sup> Benchmarking Electric Utilities: Combining Energy Conservation, Renewable Energy, and Financial Strength, Gainesville Regional Utilities, October 2004

<sup>&</sup>lt;sup>76</sup> Balancing Conservation, Renewable Energy, and Financial Strength, Presentation to the Gainesville City Commission, November 1, 2004

During this time, the City Commission also decided that GRU should not participate in a jointly owned unit to be located at the Deerhaven site, thereby removing from consideration the development of a larger, more cost-effective coal-fueled unit that could have been jointly owned by GRU and others.<sup>77</sup>

In addition to community outreach and City Commission Workshops, GRU also engaged outside assistance including retaining RW Beck, Inc. ("RW Beck") to perform an "Independent Engineering Review of GRU's IRP Proposal.<sup>78</sup> At the time, GRU was focused on two of many options including: 1) a 220 MW Circulating Fluidized Bed ("CFB") coal-fueled unit to be constructed at the Deerhaven site and to be wholly owned by GRU, or 2) a 77.5 MW natural gas-fueled generation facility planned for 2022.<sup>79</sup> Based on RW Beck's independent evaluation, GRU concluded that a 220 MW CFB option was a "robust plan over a wide range of assumptions including fuel costs, capital costs, interest rates, and

environmental costs" and that it was "consistently projected to be lower in costs than alternative plans involving gasonly resources."<sup>80</sup>

GRU's focus on a coal-fueled option, over natural gas, was supported by continuing concern over the historical increase and trend in natural gas prices (as noted by continued reference to historical natural prices as shown in the adjacent chart), as well as speculation that natural gas production (and reserves in the United States) had peaked.<sup>81</sup>



3. The City's Interest in Renewable Energy

GRU's focus on renewable energy, and the proposed 220 MW coal-fired plant with up to 30 MW of biomass, was consistent with its understanding of the City Commission's objectives at that time "that the City's electric utility be financially strong as well as a leader in promoting energy efficiency and the use of renewable resources."<sup>82</sup>

<sup>&</sup>lt;sup>77</sup> Letter to E. Regan, Assistant General Manager of Strategic Planning from RW Beck, Inc., Subject: High-Level Independent Review of the Preliminary Integrated Resource Plan, dated November 9. 2004

<sup>&</sup>lt;sup>78</sup> Independent Engineering Review of GRU's IRP Proposal, for Gainesville Regional Utilities, by RW Beck, dated November 15, 2004

<sup>79</sup> Ibid

<sup>80</sup> Ibid

<sup>&</sup>lt;sup>81</sup> Gainesville Regional Utilities' Long Term Electrical Supply Plan, Presented to the Alachua County Board of County Commissioners, dated November 23, 2004

<sup>&</sup>lt;sup>82</sup> Benchmarking Electric Utilities: Combining Energy Conservation, Renewable Energy, and Financial Strength, Final Report, Gainesville Regional Utilities, October 2004

In its preliminary IRP, GRU stated that "solar and biomass are the most abundant and cost effective forms of renewable energy in north central Florida;" and that a GRU commissioned study of the potential availability of biomass for utilization concluded that "about 30 MW of electric generating capacity could be supported."<sup>83</sup> GRU's observations were further supported by a supplemental study prepared by Black & Veatch that looked at, among other things, "1. Methods for incorporating biomass into the fuel mix."<sup>84</sup> The Black & Veatch study concluded that, "Biomass appears to be a viable resource for further investigation by GRU" and that "There appears to be abundant biomass in the immediate vicinity of Gainesville to support at least 30 MW of biomass power."<sup>85</sup>

#### a) Florida Regulatory Policies and Energy Plan

GRU's efforts to evaluate long-term additional generation capacity coincided with, and were no doubt influenced by, significant efforts and changes in the U.S. and Florida to promote energy conservation and to support the development of renewable forms of energy. On February 12, 2002, President Bush announced the Administration's Global Climate Change Initiative. A key goal of the Climate Change Initiative was to reduce U.S. greenhouse gas intensity (i.e., measured as U.S. greenhouse gas emissions to economic output) by 18 percent over the 2002 to 2012 time frame. <sup>86</sup> Similarly, in 2002 the Florida Legislature directed the Florida PSC, in consultation with the Florida DEP, to do an assessment of renewable energy in Florida and its potential for electric generation. The resulting report, *An Assessment of Renewable Electric Generating Technologies for Florida*, published in January 2003, observed that Florida, at the time, had approximately 680 MW of renewable capacity but that almost all of the existing fleet of renewable based generators had been constructed during the 1980s and early 1990s.

The study further observed that Florida had a number of feasible renewable resources (i.e., technologies that could be deployed in the near future) including biomass derived fuels, MSW, landfill and digester gas. The study concluded the potential to develop an additional 651 MW of generation capacity in the near term that would be commercially feasible. The adjacent table summarizes the study's findings.

	reasibility of Renews	able rechnologies
	Type of Renewable Energy P	otential Incremental Capacity (MW)
	Municipal Solid Waste/Refuse Derived	Fuel 60*
	Wood/Bark	225**
	Landfill Gas	32
	Bagasse	150
	Hydro-electric	43
	Solar Photovoltaic	1 (assumed)
	Waste Heat	140 to 440***
* Inform 250-300	nation provided by the Integrated Waste Services A D MWs of new capacity is potentially available from	ssociation indicates that within a ten year period som expanded facilities.
** Infor waste f	nation provided by Gus Cepero of Florida Crystals acilities are possible and a 15,000 acre dedicated	suggested that an additional 75 MWs of urban woo eucalyptus crop could support a 50 MW facility.
ANA This	estimate was provided by the Florida Industrial Co	openeration Association. The 140 MW potential exist

<sup>&</sup>lt;sup>83</sup> Alternatives for Meeting Gainesville's Electrical Requirements through 2022, Base Studies and Preliminary Findings, Gainesville Regional Utilities, December 2003

<sup>&</sup>lt;sup>84</sup> Supplementary Study of Generating Alternatives for Deerhaven Generating Station, Prepared by Black & Veatch, March 2004

<sup>&</sup>lt;sup>85</sup> Ibid

<sup>&</sup>lt;sup>86</sup> Annual Energy Outlook 2005 (with Projections to 2025), Energy Information Administration, February 2005

4. Other Interest in Conservation and Renewable Energy

In addition, to the various internal studies, reports and presentations, as well as the community outreach program and external consultant evaluations, the Alachua County Environmental Protection Advisory Committee ("EPAC") also initiated an in-depth assessment of GRU's IRP in November 2004.<sup>87</sup> Among many observations, EPAC made the following recommendations to the City Commission:

- GRU should evaluate proposals regarding Greenhouse Gas ("GHG") controls.
- GRU should evaluate potential customer base reductions under potential deregulation.
- GRU should evaluate maximizing biomass use to meet increased demands for the near term.
- GRU should convene independent experts to peer review GRU's responses to EPAC's proposals.<sup>88</sup>
  - 5. GRU's Recommendations for Energy Conservation

GRU made the following long term electrical supply recommendations to the City Commission on March 5, 2005, which were unanimously approved:

- Meet an additional 10% of Gainesville's electrical energy requirements from renewable energy and conservation by 2012 (over and above the 5% achieved to date);
- Institute a proposed Greenhouse Gas Fund to support local projects to reduce carbon dioxide;
- Modify existing facilities at the Deerhaven plant site to minimize the emission of SO<sub>2</sub>, NO<sub>x</sub> and Particulates, and to meet the Maximum Available Control Technology (MACT) for mercury;
- Add air quality monitoring to better establish baseline ambient air quality conditions; and
- Add base load generation capacity designed, among other things, to:
  - o Meet Best Available Control Technology;
  - Utilize a mix of relatively abundant solid fuels including coal, petroleum coke, and the equivalent of at least 30 MW of biomass; and
  - Produce electricity at a cost expected to be competitive in the retail and wholesale market.<sup>89</sup>
  - 6. Added Concerns Expressed by EPAC Lead to Further Review

In September 2005 however, EPAC submitted another review to the Alachua County Board of County Commissions of GRU's proposed long term electrical supply recommendation.<sup>90</sup> While echoing some of the same questions and concerns from its initial review, EPAC raised significant concerns regarding GRU's proposed efforts to implement greater conservation and energy efficiency programs and their efforts to address the challenge of climate change stating:

<sup>&</sup>lt;sup>87</sup> Technical Review of Gainesville Regional Utilities Integrated Resource Plan by Alachua County Environmental Protection Department, Updated November 15, 2004

<sup>&</sup>lt;sup>88</sup> Staff Response to EPAC's Recommendations to Gainesville City Commission Regarding GRU's Power Plant Proposal, dated December 13, 2004

<sup>&</sup>lt;sup>89</sup> Long Term Electrical Supply Plan, March 7, 2005 Recommendations

<sup>&</sup>lt;sup>90</sup> Review of the Gainesville Regional Utilities' Proposal for a New Coal-Fired Power Plant, prepared by Dian Deevey and David Harlos Sc.D for the Alachua County Environmental Protection Advisory Committee, submitted to Alachua County Board of County Commissioners, September 15, 2005

"GRU's plan does not meet the impending challenges of our changing energy future."

"EPAC's review of GRU's proposals has found many areas where GRU's approach fails to respond to new challenges, and appears to embrace the old "burn to earn" model of an electric utility in the community...."

In addition, EPAC proposed evaluating the potential benefits of substituting a hypothetical 100-MW biomass generator in place of the proposed 220-MW primarily coal-fueled generator. EPAC noted in its report the benefits of greater biomass use and represented that, while the costs of a biomass facility could be slightly more, it would save money when greenhouse gas regulations are implemented. EPAC was further critical of GRU's proposal for a 220 MW system and that it would result in "significant excess energy capacity through 2023", noting the ability to generate and sell excess energy as being a key to the financial success of such a proposal (i.e., "[w]*ill GRU have a ready market for all the excess electric energy it can produce through and beyond* 2023?)"<sup>91</sup>

The Alachua Board of County Commissioners also retained Numark and Associates ("Numark"), an energy consulting firm based out of Wasthington, D.C., to perform an expert review of the EPAC report. The Numark report supported most of the observations made in the EPAC report and raised additional concerns including the expressed need for GRU to evaluate more effective DSM plans, as well as concerns that EPAC may have underestimated the potential for GRU to incorporate alternative power generation strategies such as the use of biomass, among other alternatives.<sup>92</sup>

7. Third-Party Evaluation of GRU's Proposed Generation Alternatives

In November 2005, the City Commission voted to retain ICF Resources Inc. ("ICF Consulting") to provide an independent consultation on options for meeting the electrical supply needs of the Gainesville community.<sup>93,94</sup> The City Commission also voted to retain GDS Associates, Inc. ("GDS") to provide a more limited peer review of the report submitted by ICF.

8. The City's Commission's Priorities Shifted to Conservation and Renewables

Also, during the same period in late 2005, the City of Gainesville Mayor signed the U.S. Mayors' Climate Protection Agreement in which Mayor Hanrahan committed the City to the following actions:

- Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions
  ranging from anti-sprawl land-use policies to urban forest restoration projects to public
  information campaigns;
- Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012; and

<sup>91</sup> Ibid

<sup>&</sup>lt;sup>92</sup> Letter from Numark Associates, Inc. to Dr. John Mousa, Pollution Prevention Manager, Alachua County Environmental Protection Department, Dated December 7, 2005

<sup>&</sup>lt;sup>93</sup> City of Gainesville, City Commission Meeting Minutes, Monday, November 14, 2005

<sup>&</sup>lt;sup>94</sup> Preliminary Draft, Overview of the Gainesville IRP Assumptions, prepared for City of Gainesville, prepared by: ICF Consulting, dated January 26, 2006

- Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.<sup>95</sup>
  - a) The City Commission's Views Coincided with Florida Energy Efforts

In November 2005, the Governor of Florida, Jeb Bush, issued Executive Order Number 05-241, which directed the Florida Department of Environmental Protection ("DEP") to develop a comprehensive energy plan for the state, and calling for the Governor's Office and the Governor's executive agencies...

*"to continue their energy conservation efforts to reduce the demand for energy in Florida and* ... to develop innovative conservation initiatives to serve as a model for all Floridians."<sup>96</sup>

The *Florida Energy Plan* developed by the Florida DEP was issued to the Governor on January 17, 2006, and recommended that legislation be introduced in 2006 to help increase the capacity and diversity of the state's electricity generation and transportation fuel supply.<sup>97</sup>

b) The City Commission's Views were Consistent with National Efforts

At the time, energy efficiency and demand response initiatives were being expanded in many states.98



<sup>95</sup> Letter for Southern Alliance for Clean Energy to Ms. Pegeen Hanrahan, Mayor of Gainesville, dated November 10, 2005

- <sup>96</sup> Florida's Energy Plan, Allan Guyet, Director, Florida Energy Office, Department of Environmental Protection
- <sup>97</sup> State of Florida, Office of the Governor, Executive Order Number 05-241, executed November 10, 2005
- <sup>98</sup> Presentation by Navigant Consulting to the Florida Utility DSM Working Group, DSM Measure Database and Assessment Methodology, July 27, 2006

In 2007, renewable energy programs were being considered and/or developed by a larger number of federal, state and municipal government agencies and utilities. However, questions continued as to whether such initiatives would provide reliable, cost-effective and environmentally beneficial results. Evidence of the increasing focus on renewable energy included:<sup>99</sup>

- 22 states had renewable portfolio standards, and 9 more were considering rules to require utilities to provide some power from green sources; and
- Approximately 20 percent of all utilities nationwide were estimated to participate in green energy programs.

However, utilities were nervous about putting capital into emerging technologies that might not have immediate payback and that might not adequately be recovered through the rate base.

- The results from ICF Consulting's final report dated March 1, 2006, are summarized in the adjacent table.<sup>100</sup> Following ICF's submission of its final report, Dr. Paul Sotkiewicz, Director of Energy Studies with the Public Utility Research Center at the University of Florida, assessed the risks associated with the various options evaluated by ICF and concluded that the "best course forward over the long term is to meet Gainesville's future power needs with either the 220 MW IGCC option or the 220 MW
- 9. The City's Outside Consultant Recommend Coal and IGCC Options

		Exhibit ES-36 Summary Results			
	Options				
Criterion	CFB	IGCC	Biomass Maximum DSM	Maximum DSM	
Expected Revenue Requirements	Essentially Tied for Second	Best	Essentially Tied for Second	Essentially Tied for Second	
Performance/Capital Cost/Financing Risk	Low	Medium High	Medium High	Medium High	
Risk Due to Exposure to High Wholesale Market Prices/High Oil and Gas Prices	Low	Low	High	Highest	
Risk Due to Exposure to Low Gas Prices	Medium	Medium	Low	Low	
Variability of Revenue Requirements	Low	Low	Low	Medium	
Local CO <sub>2</sub> Emissions	High	Medium High	Low	Low	
Grid CO <sub>2</sub> Emissions	Medium	Medium	Medium	Medium	
Local NO <sub>x</sub> , SO <sub>2</sub> Emissions	Low	Lower	Lower to Lowest	Lowest	
Health Effects	Comply with Ambient Standards	Comply with Ambient Standards	Comply with Ambient Standards	Comply with Ambient Standards	
SocioEconomic Jobs	High	High	High	Medium	

CFB option" with emphasis on the IGCC option noting that both (as evaluated) would have the ability to use biomass as a fuel and hedge against future carbon policy.<sup>101</sup>

a) Biomass was not in Widespread Use in Florida

Renewable energy sources of electricity did not account for a large portion of Florida's energy production in 2004. Most biomass energy created in Florida came from non-utility generators (i.e., non-utility producers of renewable energy that use their output on-site, and then sell the remainder to

<sup>&</sup>lt;sup>99</sup> Energybiz Insider Newsletter, Subject: Renewables Build Head of Steam, Dated: March 12, 2007

<sup>&</sup>lt;sup>100</sup> City of Gainesville, Electricity Supply Needs (RFP No. 2005-147), by ICF Consulting, dated March 1, 2006

<sup>&</sup>lt;sup>101</sup> Email (with attachment) from Paul Sotkiewicz to the City Commission, Subject: Recommendations and Justifications, dated March 21, 2006.

electric utilities).<sup>102</sup> At the time, most Florida renewable energy production came primarily from hydroelectric, landfill gas, and waste-to-energy (biomass) sources. However, as with elsewhere in the country, the focus on renewable energy in Florida was gaining momentum, especially given heightened concerns worldwide with regard to the impact of greenhouse gases on the global climate and the cited evidence to climate change.

Despite strong growth in renewable electricity generation as a result of technology improvements and expected higher fossil fuel costs, the use of renewable technologies for electricity generation was projected to grow slowly both because of the relatively low costs of fossil-fired generation and because competitive electricity markets favored less capital-intensive technologies. The total renewable generation was expected to increase by 1.4% a year from 2005 to 2025, and grid-connected electricity generators using renewable fuels would remain only as minor contributors to U.S. electricity supply.<sup>103</sup>

10. City Commission Votes to Pursue a Biomass Option

On April 10, 2006, GRU staff summarized the key findings from the ICF study and provided rankings for the various options that had been developed and evaluated by GRU and ICF, among others.<sup>104</sup> The

final ranking of the options evaluated by ICF Consulting was prepared and summarized by GRU Staff, which is provided in the adjacent table. The "Small CFB + DSM" option related to a hypothetical 75 MW biomass only facility.

On April 12, 2006, the City Commission voted to change their metrics for evaluating potential DSM and long term supply proposals from the Rate Impact Measure (RIM) to the Total Resource Cost (TRC) approach, and to

		ED RANK ANE	DEACH CRI			ON	
FACTOR	CFB	IGCC	Small CFB + DSM	Max DSM	NGCC	CFB + DSM	IGCC +
Residential Bill - \$/Month	\$167.68	\$157.54	\$180.59	\$181.77	\$179.51	\$173.91	\$163.68
Rank	4.49	7.00	1.29	1.00	1.56	2.95	5.48
Health Effects - \$M/Year	\$22.50	\$13.50	\$11.25	<b>\$</b> 9.00	\$9.00	\$22.50	\$13.50
Rank	1.00	5.00	6.00	7.00	7.00	1.00	5.00
CO <sub>2 (tons)</sub>	45	43	29	30	44	44	43
Rank	1.00	1.75	7.00	6.63	1.38	1.38	1.75
Number of Job Years	13,192	11,986	18,288	1,500	11,986	14,692	13,486
Rank	5.18	4.75	7.00	1.00	4.75	5.71	5.28
Price Volatility - NPV \$M	\$758	\$720	\$812	\$952	\$1,270	\$698	\$662
Rank	6.05	6.43	5.52	4.14	1.00	6.64	7.00

initiate a process to develop a conceptual design and pricing for the following:

- A small(<100 MW) facility capable of 100% biomass on site locally;
- An IGCC unit on site locally (260 MW or less) or off-site if bigger, preferable using biomass;

<sup>&</sup>lt;sup>102</sup> A Review of Florida Electric Utility, 2004 Ten-Year Site Plans, Prepared by the Florida Public Service Commission, Division of Economic Regulation, December 2004

<sup>&</sup>lt;sup>103</sup> Annual Energy Outlook 2005 (with Projections to 2025), Energy Information Administration, February 2005

<sup>&</sup>lt;sup>104</sup> ICF Final Report (RFP No. 2005-147), City of Gainesville Electrical Supply Needs, Executive Summary and Decision Matrix Revised to Include Maximum DSM with CFB and IGCC Options, prepared by Gainesville Regional Utilities, April 10, 2006

- Be open to partnerships either on-site or off-site; and
- Carbon neutrality reduce carbon intensity per capita.
  - 11. Differing Views and Priorities Led to the General Manager's Departure

In essence, the City Commission's directives on April 12, 2006 were a wholesale change in direction for energy supply planning from the 220 MW solid fuel (coal-based) option (with up to 30 MW of biomass) that had been analyzed, evaluated and developed by GRU since 2002, and subsequently recommended to the City Commission. Surprisingly, the City Commission appears to have dismissed the years of analysis and effort conducted by GRU and recommended by GRU management for a smaller biomass option that apparently was first proposed for consideration by the Alachua County EPAC study in 2005 and then subsequently included in the ICF peer review study in early 2006.

On March 27, 2006, GRU's long-standing General Manager, Mike Kurtz, and the main force behind GRU's long term electrical supply plan, resigned.<sup>105</sup> While Mr. Kurtz was contemporaneously involved in re-negotiating a specific term in his contract with the City (at the direction of the City Commission), Mr. Kurtz ultimately had been the force behind GRU's multi-year effort at this point to assess, evaluate and develop a long-term energy plan that the City Commission had decided to disregard.

<sup>&</sup>lt;sup>105</sup> GRU Internal Email Communication, Subject: e-Line – Mike Kurtz Retiring, from Marsha K Anderson to the City Commission and City Manager, dated March 27, 2006

V.

#### **Review of Decision-Making – RFP to Equitable Adjustment**

#### A. Introduction

Among other aspects of Navigant's Investigative Review, Navigant was tasked with evaluating the decision-making processes and relevant transactions occurring from the time the City Commission authorized GRU to issue an RFP to solicit biomass-fueled electrical generation in October 2007 until November 15, 2013. During that time, GRU issued the RFP in October 2007, selected Nacogdoches Power as the finalist in the solicitation process in May 2008, executed the GREC PPA in April 2009, and then amended the GREC PPA in March 2011 through a "Change in Law" provision in the contract.

However, despite a lengthy (multi-year) process involving numerous individuals, presentations, independent reports, and avenues for public discussion, the GREC PPA and development of the biomass-fueled generation facility continued to face significant criticism and questions. The questions and concerns have come from City elected officials, concerned citizens, and in regulatory proceedings, as well as through the legal system including a lawsuit challenging the City's right to withhold certain information with regard to the PPA from the public under Florida's Public Records Laws.

Nacogdoches Power, LLC was a Delaware Limited Liability Company formed in 2005 to develop, own and operate electric generating facilities. At the time of the RFP, and its selection by GRU to begin negotiating the PPA, it was owned by BayCorp Holdings, Ltd. ("Baycorp") and EMI Nacogdoches, LLC (which was owned by affiliates of Energy Management, Inc. "EMI"). However, prior to finalization of the PPA, GREC was formed as the primary entity responsible for the development of the biomass facility. GREC was owned 100% by American Renewables, LLC, an entity created by BayCorp and EMI with significant additional financial contribution from Tyr Energy LLC.

A summary of the key events and dates discussed in this section is provided below:

- April 12, 2006 The City Commission voted to initiate a process for a conceptual design and pricing to be used for an all source solicitation for proposals to meet GRU's energy needs.
- September 5, 2006 GRU submitted RFI No. 2006-169 "seeking opportunities to either develop additional base load electric generation capacity at its Deerhaven Power Plant site or to participate in one or more base load power supply project(s) located elsewhere." <sup>106</sup>
- October 8, 2007 The RFI was subsequently followed by a RFP No. 2007-135 for biomassfueled generation capacity authorized by the City Commission.<sup>107</sup>
- January 28, 2008 After evaluation and ranking of eleven (11) indicative proposals received in response to the RFP, the City Commission authorized the GRU General Manager to invite the three top-ranked respondents to submit binding proposals. The top three bidders consisted of 1) Sterling Planet, 2) Covanta Energy, and 3) Nacogdoches Power, in that order.

<sup>&</sup>lt;sup>106</sup> Gainesville Regional Utilities Energy Supply Development Request for Letters of Interest (GRU No. 2006-169), dated September 5, 2006

<sup>&</sup>lt;sup>107</sup> City of Gainesville, Meeting Minutes, Monday, October 8, 2007

- May 12, 2008 After receipt and evaluation of the binding proposals, the City Commission voted to approve the recommended rankings and selected Nacogdoches Power. The City Commission further authorized the "General Manager, or his designee, to negotiate and execute a contract with Nacogdoches Power, LLC for a long term power purchase agreement for a 100 MW net capacity, 100% biomass fueled facility to be constructed at the Deerhaven site…"<sup>108</sup>
- September 18, 2009 Pursuant to Section 403.519, Florida Statutes (F.S.) and Rule 25-22.080 and 25-22.081, Florida Administrative Code, GRU and GREC filed a Joint Petition to Determine Need with the Florida PSC for the GREC biomass-fueled facility.
- November 30, 2009 GREC files a Site Certification Application ("SCA") with the Florida Department of Environmental Protection ("FDEP") for the proposed construction and operation of the GREC electrical power plant and associated facilities.
- November 30, 2009 GREC files an application for a Prevention of Significant Deterioration ("PSD") air emissions permit in accordance with the Federal Clean Air Act.
- June 28, 2010 The Joint Petition to Determine Need was granted by the Florida PSC by a 3-2 vote of the Commissioners.<sup>109</sup>
- December 15, 2010 FDEP issues its final order approving GREC's SCA.
- December 28, 2010 FDEP issues its final permit to GREC in relation to the PSD application.
- March 16, 2011 GRU and GREC executes and Equitable Adjustment for Change of Law to adjust the PPA for increases in the actual costs under the contract.

#### B. Scope of Work and Objectives

Pursuant to the Scope of Services outlined in Navigant's retention letter, we evaluated the circumstances, relevant transactions and decision-making surrounding GRU's efforts to solicit proposals for a biomass-fueled generation facility in October 2007 up through November 2013 and the departure of then GRU General Manager, Mr. Robert Hunzinger. More specifically, Navigant's efforts focused on GRU's adherence to the guidance provided by the City Commission during this time period, GRU's (as well as GREC's) representations regarding the key terms of the PPA, and the overall communication process between GRU and the City Commission regarding key aspects of the PPA. In addition, throughout the Investigative Review, Navigant evaluated information obtained from documents, emails, and in discussions with various parties, with a lens for indicia of fraud, evidence of potential impropriety, conflicts of interest, or other circumstances that may have influenced decision-making that was contrary to the interests of City, GRU and its customers.

<sup>&</sup>lt;sup>108</sup> City of Gainesville, City Commission Meeting Minutes, Monday, May 12, 2008

<sup>&</sup>lt;sup>109</sup> Final Order Granting Petition for Determination of Need for Proposed Biomass Plant, Docket No. 090451-EM, Order No. PSC-10-0409-FOF-EM, Issued: June 28, 2010

#### C. Summary Findings and Observations

NAVIGANT

- Throughout Navigant's review of hard-copy and electronic files, as well as discussions with various individuals, we did not identify evidence of impropriety or potential wrongdoing that would question the integrity of the RFI/RFP process or the validity of the GREC PPA and subsequent amendment. While numerous questions and concerns have been raised regarding the propriety of the negotiation and decision-making processes around both the GREC PPA and the amendment of the PPA through the Equitable Adjustment, Navigant did not identify evidence that would further these concerns.
- In addition, and although we note a significant lack of adequate disclosure around issues germane to the GREC PPA and the Equitable Adjustment, including questioning whether such non-disclosure was intentional, we did not identify evidence that would lead us to believe that such nondisclosure was in an effort to conceal improper activity.
- The processes followed by GRU and the City in their efforts to solicit and select a vendor for the proposed biomass facility were largely sound and followed best-practice in certain areas, but they were not without significant shortcomings as well. GRU's RFI and RFP solicitation processes were a robust and fairly transparent process that involved numerous individuals. However, while many practices employed by GRU were consistent with those considered bestpractice, several deficiencies likely had a negative impact on the vendor solicitation, ranking and selection process, and ultimately efforts around the PPA negotiation and execution.
- Most notable among the deficiencies observed in the RFI/RFP process included: 1) the issuance
  of an overly broad RFI, 2) GRU's failure to include a preferred form of PPA in the RFP, 3) the
  failure to require firm pricing by a set date, and 4) the failure to include ratepayer impact as a
  key evaluation criteria in its ranking process.
- The RFI and RFP processes could have benefitted from more stringent guidelines on plant size, GRU's needs, proposed contract terms and other key areas of risk. The breadth of proposals received in response to the RFI covered a broad spectrum of biomass, IGCC and other options, which prevented a basic "apples to apples" comparison that could have been used to more effectively tailor the RFP to a narrower range of sizes, bed technologies and pricing structures.
- GRU's criterion and evaluation scoring/ranking process appeared to be open and transparent. However, we question the re-weighting and re-evaluation of criteria between the initial and binding proposals received from Sterling Planet, Covanta and Nacogdoches Power. Given that the evaluation of the binding proposals was on the same basis as the initial proposals (i.e., and not on the basis of new information) we failed to see the significance of that effort. In addition, and despite the lack of significant changes between the initial and binding proposals, we noted a substantive, and relatively unsupported, change in the scoring on certain criteria that substantially improved the ratings of Nacogdoches Power over the other two finalists.
- Further, GRU's RFP ranking criterion heavily weighted environmental attributes over other criterion of the proposed plants. While it was understood that environmental sensitivity was a

primary concern for the City Commission, in our opinion the ranking methodology overweighted such criteria to the detriment of financial criterion, including noting the absence of any criterion evaluating the impact of the various proposals to GRU's customers.

- While we viewed GRU's practices with regard to both the RFI and RFP processes to be sound, we would recommend the consideration of certain additional best-practices going forward including creating standard competitive bidding requirements, requiring draft contract submittals, requiring confirmed prices through certain dates, and conducting more extensive background checks of respondents.
- Navigant also reviewed the circumstances and decision-making around the GREC PPA and the Equitable Adjustment and, while noting significant areas for concern, did not identify evidence of fraud, conflicts of interest or other potential wrongdoing among the various parties involved in the negotiations. While the circumstance surrounding the negotiation and execution of the PPA are more fully discussed in another section to this Report, the circumstances and decision-making around the Equitable Adjustment are discussed below.
- While the Equitable Adjustment was executed in March 2011, and the ramifications of which not fully realized by the City Commission until 2013, the decision precipitating the contract amendment appears to have been made within a relatively short time-frame after the approval of the PPA in May 2009...a decision apparently agreed to by GRU's Senior Management.
- Ample evidence exists to support that the decision to change from the SNCR to the SCR for air emissions control was made in late 2009, if not sooner, as the proposed facility with the SCR served as the basis for the applications filed regarding site certification and emissions to the FDEP in November 2009. In addition, the decision appears to have been discussed and evaluated with various individuals at GRU, and was with their concurrence.
- However, despite assertions by GREC that the regulatory requirements, as interpreted and imposed by FDEP were changed, we did not identify conclusive evidence that such was the case, especially since no formal position was ever taken by FDEP and that GREC is reportedly the only biomass-fired facility in the U.S. using an SCR control device to control emissions.<sup>110</sup>
- In addition, we have reviewed certain memoranda and opinions provided in relation to the Equitable Adjustment and whether the described circumstances constituted a "Change in Law" under the PPA. However, we have identified no evidence to support the conclusion that the change to an SCR should have been treated as a Change in Law under the contract.
- Notwithstanding opinions to the contrary, GRU signed the March 16, 2011 Equitable Adjustment for Change of Law agreement that increased the Non-Fuel Energy Charge by

<sup>&</sup>lt;sup>110</sup> Letter from Len Fagan, American Renewables to Christopher Kirts, Florida Department of Environmental Protection, Re: Gainesville Renewable Energy Center, LLC (GREC) Air Permit No. 0010131-003-AC (PSC-FL-411, Dated: July 16, 2014

\$4.40/MWh, and reportedly may result in increased costs to GRU ratepayers of \$105 million (nominal) over the 30-year PPA term.<sup>111</sup>

- However, despite our opinions regarding the applicability of the Change in Law provision in this circumstance, we stop short from taking the position that the change from the SNCR to the SCR was not a prudent decision, or that the decision ultimately did not facilitate and streamline the permitting process with FDEP. We understand that a prolonged permitting process was a significant concern for both GRU and GREC, and that such a process may not have been beneficial to the mutual interests of both parties given the proposed timetable for the facility and the desire to qualify for certain federal and/or state tax incentives.
- While we do not raise significant questions regarding the ultimate decision, in our opinion the decision-making process suffered from significant failures including: 1) GRU's failure to more timely evaluate the potential economic impact of the proposed change, 2) the failure to participate in meetings with FDEP leaving GRU subject to the interpretations and representations of GREC as to the content and direction of FDEP's positions, 3) the failure to keep the City Commission apprised of the change in 2009 including the potential need to amend the PPA, and 4) the failure to seek approval, or at least inform, the City Commission of the Equitable Adjustment and its related impact.

#### D. Evaluation, Analysis and Observations

1. The RFI and RFP Processes were Open and Transparent

GRU's RFI and RFP processes were open and transparent and we identified no evidence of improper actions that would have benefitted one respondent over another. We reviewed information and emails during the 2006 to 2008 time-period covering the issuance and review of both the RFI in September 2006 and the RFP in October 2007 through to the selection of Nacogdoches Power in May 2008. While GRU had initial contact with representatives from Nacogdoches Power in mid-2006, we did not identify evidence that would raise questions as to whether Nacogdoches Power had an unfair advantage in the process relative to other respondents to both the RFI and RFP.<sup>112</sup>

2. GRU Submitted a Request for Letters of Interest ("RFI") in September 2006

GRU submitted a RFI on September 5, 2006 seeking opportunities to develop additional base load electric generation capacity at its Deerhaven Power Plant Site or to participate in one or more base load power supply projects located elsewhere.<sup>113</sup> The RFI specifically referenced the City Commission passed motion on April 12, 2006 and its emphasis to explore the following alternatives:

- A small (< 100 MW) facility capable of 100% biomass on site locally
- An IGCC unit on site locally (260 MW or less) or off-site if bigger, preferably using biomass

<sup>&</sup>lt;sup>111</sup> Chief Financial Officer Jennifer Hunt signed the agreement at the request of Mr. Hunzinger. Ms. Hunt was not aware of the Change in Law issue.

<sup>&</sup>lt;sup>112</sup> It is worth noting that the City's expressed interest in a < 75 MW biomass facility was significantly aligned with Nacogdoches' experience and a similar 100 MW biomass facility being developed in Texas.

<sup>&</sup>lt;sup>113</sup> Gainesville Regional Utilities Energy Supply Development Request for Letters of Interest, September 5, 2006

- Be open to partnerships either on-site or off-site
- Carbon neutrality reduce carbon intensity per capita
  - a) GRU's RFI Emphasized Base Load Capacity and Renewable Energy

GRU's forecasted electrical base load generation needs were summarized by the following table:

Additional Base Capacity for Various Time Frames Under Various Scenarios				
(Cumulative Net Megaw	atts)			
SCENARIO	2008	2013	2018	2022
Historical Trend	103	137	200	284
Historical Trend less Maximum DSM	96	110	147	188
Historical Trend less Maximum DSM and Wholesale Contracts Retired	63	70	92	136

The RFI also specified that the City wished "to place only the most environmentally sensitive generation capacity as possible on the site", and went on to specify that biomass options with the "flexibility to use other solid fuels may be advantageous..." In addition, in summarizing the responses to the RFI, GRU identified several key points "as givens" for the City Commission's consideration of the proposals including the following:

- We will continue to do maximum cost-effective conservation;
- Additional power supply will be needed;
- It is very likely that a Renewable Energy Portfolio Standard and Carbon Constraint Legislation will be imposed in the next few years; and
- Interest in Biomass resources are increasing rapidly (noting JEA's and FPL's renewable energy RFIs).<sup>114</sup>
  - b) The RFI was Broad and the Responses Varied

There was a wide range of potential base load capacity requirements listed in the RFI, as well as a significant difference in the two primary alternatives identified by GRU (i.e., <100 MW Biomass or 260 MW IGCC). This disparity also prompted concern among some RFI respondents (e.g., *"The two new generation projects are very different in every aspect including their size, type, operational requirements, total installed cost, etc."*).<sup>115</sup> However, GRU stated that it "anticipates a wide range of technologies and contractual structures to be represented" in the RFI. In addition, GRU did not limit responses to just the proposed two generation projects but welcomed "Any possible off-site participation or proposal" and emphasized that proposals need not be "limited to any particular technology."<sup>116</sup>

<sup>&</sup>lt;sup>114</sup> Designing an Energy Supply Plan: Results from the "All Source Solicitation", presentation to the Gainesville City Commission, May 10, 2007

<sup>&</sup>lt;sup>115</sup> City of Gainesville Regional Utilities, Addendum No. 4, Energy Supply Development Request for Letters of Interest, RFI No. 2006-169)

<sup>116</sup> Ibid

On June 18, 2007, GRU presented its final options and recommendations to the City Commission. In its presentation, GRU reiterated the goals of the long-term energy supply planning as "always about the need for base load capacity at an economic price," and that the City Commission should:

- Expect to see Renewable Portfolio Standards (RPS) in the Florida legislature; and that
- Staff has a sense of urgency not in our customers' best interest to be trailing the market especially since renewable resources are limited in Florida.<sup>117</sup>

In conclusion, GRU recommended that the City Commission should approve the pursuit of "building or partnering on a small biomass plant", which is "[d]riven by both our need for base load capacity and our expectation that there will be an RPS in the near future."<sup>118</sup>

While we appreciate that the RFI process was used to identify and explore various alternatives, the City Commission's decision to move forward with a biomass (or IGCC) option was the result of over four years of evaluation that started with the development of GRU's IRP. In some respects, it is clear that the City Commission's primary objective at this point was to explore a biomass-fueled generation option and, if so, we question why it was not the sole focus of the RFI. Further, if the City Commission needed additional options, we question why there seems to have been little analysis of various biomass options, technologies, plant sizes, etc. by GRU in the time-period between the City's decision to move forward in April 2006 through to the submission of the RFP in October 2007.

3. GRU Issued a Request for Proposals (RFP) in October 2007

In October of 2007, GRU issued the subject RFP seeking proposals for base load generation to be constructed at the Deerhaven Generating Site. The RFP stated that it would consider only facilities using biomass or municipal solid waste as the primary fuel options for participation in the procurement (even though MSW had been previously rejected by the citizens of Gainesville as an option).<sup>119</sup> Proposals were due on December 14, 2007 and GRU conducted a non-mandatory pre-proposal meeting and site visit on November 9, 2007.

The RFP sought proposals offering the greatest value to GRU ratepayers based on an evaluation of the new generation resource's ability to provide: (i) cost effective renewable capacity and/or energy benefits; (ii) environmental attributes consistent with the preferences of the Gainesville community; and (iii) enhanced and reliable energy supply to the GRU system.<sup>120</sup> In addition, GRU stated that it preferred proposals in which the project operator would be responsible for fuel acquisition and price, that it would prefer a "Take-and-Pay" PPA with a term of 15 years or longer with an option for GRU to purchase and own the project at a future date. GRU also required that the selected project be at a commercially proven stage of development, and noted that the number of units in commercial operation of the size being proposed and their reliability record would be considered in evaluating the risk associated with each proposal.

<sup>117</sup> Ibid

<sup>118</sup> Ibid

<sup>&</sup>lt;sup>119</sup> Gainesville Regional Utilities Energy Supply Development Request for Proposals for Biomass Fueled Generation Facility, GRU RFP 2007-135, Dated October 2007

<sup>120</sup> Ibid

GRU employed a two-step process in evaluating proposals that included: 1) soliciting non-binding indicative technological and financial structure proposals, and 2) after evaluating the indicative proposals, inviting no more than three bidders to submit final binding proposals.<sup>121</sup>

The responses to the RFP, as with the RFI, were also broad and varied. GRU received eleven responses that varied significantly from each other, and subsequently disqualified two proposals as non-responsive. Provided below is a table summarizing some of the key aspects of the proposals received:

Respondent	Technology	Size	Pricing	Terms
Green Power Systems	Plasma	42 mw gross/35 mw net	\$ .068/kwh	30 year PPA with escalator
Covanta Energy Corp.	Fluidized Bed Boiler	58 gross/50 mw net	???	Long-term PPA
Horizon Energy Group	Plasma	36 mw	\$55/mw	20 PPA with 2% cap
NRG Energy	Plasma	108 mw or 64 mw	\$96 to \$126/mw	20 year PPA
Envortus	Induced Draft	17.6 net mw	\$116 to \$171/mw	20 year take or pay
Nacogdoches Power LLC	Fluidized Bed Boiler	100 mw or 50 mw	\$85 to \$135/Mw	20 year PPA
Taylor Biomass Energy, LLC	Gasification	40 mw gross/35 net	\$70/MW indexed	Joint LLC or take or pay
Sterling Planet, Inc.	Fluidized Bed Boiler	30 mw gross/28 net	\$64 to \$86/mw	20 year PPA
Timberland Harvesters, Inc.	Fluidized Bed Boiler	32 mw	\$119/mw starting	25 yr take or pay PPA

As can be seen in the table above, the size of facilities proposed varied widely from 17.6 MW to a 100 MW, were based on four differing technologies, and offered a wide variation in pricing and options for terms and conditions. It is from this list of respondents that GRU moved forward into the binding proposal stage.

4. GRU's Procurement Process was Sound but with Several Shortcomings

While GRU's October 2007 "Energy Supply Development Request for Proposals for Biomass-Fueled Generation Facility" was comprehensive, and adhered to best-practice in certain areas, it had some shortcomings. It was comprehensive in that it included, among other things, a pre-submission workshop and Deerhaven site visit; provision for the submission of initial non-binding proposals; preliminary evaluation and screening of proposals; and selection of no more than three bidders to be invited to submit binding proposals for final selection.

However, the primary shortcomings of the RFP included: 1) failure to include a preferred form or draft PPA in the RFP, 2) failure to require that the proposed pricing in the binding proposals be firm through a specified date, 3) failure to specify the range of power/capacity it was seeking, and 4) failure to include ratepayer impact as an evaluation criteria. Not including the foregoing in the RFP and proposal evaluation process was detrimental to GRU in its PPA negotiations.

a) GRU Did Not Include a Preferred Form of PPA

Unlike the other short-listed bidders (i.e., Covanta and Sterling Planet), GREC did not include a proposed PPA in its binding proposal. Rather, GREC's transmittal included several pages of general PPA terms and conditions with the commitment to provide a full PPA in the event that its proposal was ultimately selected. A complete proposed PPA would be necessary for the evaluators to fully

<sup>121</sup> Ibid

understand a bidder's position on all of the issues. GREC's initial PPA draft was not received by GRU until June 23, 2008, after it had been selected and approved at the May 12, 2008 Commission meeting.

It is a common practice for utilities issuing RFPs for new generating facilities to include in the RFP package the utility's preferred PPA, often referred to as a PPA template. Some utilities use the Edison Electric Institute Master Contract<sup>122</sup> as the basis for their preferred PPA while other utilities develop their own customized preferred PPA. The RFPs typically invite bidders to offer exceptions to the preferred PPA, but advise bidders that limited or no exceptions will be afforded favorable treatment in the evaluation process.

Including a preferred PPA is essential to a solid procurement process. It is imperative that the utility be aware of a bidder's proposed exceptions early in the process to determine if further evaluation of a proposal is warranted. A bidder can provide very favorable pricing in a RFP response, but take back all the pricing benefits through its PPA exceptions. Knowing a bidder's exceptions to a preferred PPA is a critical first step in the negotiation process. By not including a preferred PPA in its RFP and relying on the bidders to provide their own preferred PPAs, GRU put itself in a disadvantageous bargaining position at the outset of the PPA negotiations.

b) GRU Did Not Require Firm Pricing to a Set Date

RFPs for new generating projects **always** include a date through which the bidder must maintain the pricing in its binding proposal. The date is typically associated with the utility's estimate as to pricing for a date when PPA negotiations will be completed and that the proposed pricing will be locked in for the PPA term. If a selected bidder attempts to change the pricing included in its binding proposal prior to the specified date, it can be used as grounds for disqualification of the bid by the utility. While GRU, to its credit, did require "binding proposals" from the three short-listed bidders, GRU should have specified a date through which the selected bidder must maintain its price.

c) GRU Did Not Specify the Required Range of Power Supply

Another concern was GRU's failure to specifically indicate how much power (or a range of power) that it was seeking. The RFP set forth the GRU capacity requirements shown in the adjacent table, but did not specify a capacity or capacity range within which a project should be proposed.<sup>123</sup>

Base Load Capacity Requirements (Cumulative Net MW)		
Year	MW	
2008	63	
2013	70	
2018	92	
2022	136	

As such, GRU received proposals ranging from 30 MW to 100 MW, which are challenging to compare from an evaluation perspective. While this would be the case for any utility, it is particularly puzzling with respect to a small system like GRU for which a 70 MW capacity differential is substantial from cost and operational perspectives.

<sup>&</sup>lt;sup>122</sup> Referred to in the industry as the EEI Master, this standardized bilateral agreement includes the essential terms governing the purchase and sale of wholesale electricity.

<sup>&</sup>lt;sup>123</sup> Gainesville Regional Utilities Energy Supply Development Request for Proposals for Biomass Fueled Generation Facility, GRU RFP 2007-135, Dated October 2007

d) GRU Did Not Include Ratepayer Impact as an Evaluation Criteria

The RFP indicated that foremost among the evaluation criteria would be the project's all-in cost, reliability, environmental impacts and contribution to GRU's fuel diversity. However, GRU's presentations of the benefits and costs provided little assessment of the long-term potential rate impacts to GRU's customers, especially in light of added costs in other areas and the projected

generation retirements in the future.

While the criteria in the adjacent table are all significant and typical in evaluating RFP responses, one criteria missing is Ratepayer Impact. It is standard practice to include Ratepayer Impact, which is usually heavily weighted and one of the most important. Regardless of how valuable a project may appear, if it places undue burden on ratepayers, it typically will not be approved.

GRU Evaluation Criteria for RFP Responses				
Project all-in production cost	Project site requirements			
Project variable production costs	Project size and design			
Technology readiness and project	Experience and resources of			
reliability	project developer/sponsor			
Environmental emissions	Proposed contractual terms and			
	conditions			
Fuel requirements and sources	Local e conomic impact			
Anticipated project in-service date	By-product/waste production and			
and/or energy delivery	disposition			
Project commitment to sustainable	Proposer's Financial Strength			
forest resource management				

#### e) GRU's RFP Ranking Process was Flawed

There are certain aspects of GRU's ranking process in the RFP that raised questions, despite the fact that the ranking process appeared to be fairly transparent and open. An example of some of the

concerns identified include the fact that Nacogdoches Power received the highest ranking for *"Proposed Contractual Terms and Conditions"* notwithstanding that it did not submit a draft PPA while the other short-listed bidders (Covanta and Sterling Planet) did.

GRU developed the matrix and criteria weights shown in the adjacent table for evaluating the proposals.<sup>124</sup> Respondents would receive a rating from 1 - 5 in relation to each category, which would then be weighted by the rating criteria to arrive at a score for each category and overall.

Category/Criteria	Criteria Weight
1. Economics: Cost Effective Renewable Capacity and/or Energy Benefits	
a) Project All-in Production Cost	10.00
b) Project Variable Production Costs	8.00
e) Fuel Requirements and Sources	7.00
f) Anticipated Project In-Service Date and/or Energy Delivery	4.00
n) Local Economic Impact	2.00
Category Total	31.00
2. Environmental: Attributes Consistent with the Gainsville Community	
d) Environmental Emissions	10.00
g) Project Commitment to Sustainable Forest Resource Management	10.00
m) By-product/Waste Production and Disposition	8.00
h) Project Site Requirements	6.00
Category Total	34.00
3. Risk & Reliability: Enhanced and Reliable Energy Supply	
k) Proposed Contractual Terms and Conditions	10.00
c) Technology Readiness and Project Reliability	9.00
j) Experience and Resources of Project Developer/Sponsor	6.00
i) Project Size and Design	5.00
l) Proposer's Financial Strength	5.00
Category Total	35.00

<sup>124</sup> Attachment C, Biomass RFP 2007-135, Evaluation Methodology, General Manager Regular Item# 070808, City of Gainesville Meeting Minutes, January 28, 2008

GRU received eleven proposals in response to the RFP, nine of which were evaluated and ranked based on the criteria described above. The adjacent table provides a listing of the eleven proposals and applicable weighted scores.

As indicated from the scores, Sterling Planet had the highest ranked indicative proposal with Covanta in second place and Nacogdoches Power third. On January 28, 2008, based on the Step 1 scoring, GRU invited the top three ranked bidders to submit binding proposals in Step 2 of the procurement process.

As part of this process, the City Commission also approved the evaluation criteria, which were essentially the same criteria and generally in the

Respondent	Criteria Ranking
Sterling Planet	363.78
Covanta	348.42
Nacogdoches Power, LLC	341.5
Green power Systems	324.58
Taylor Biomass Energy, LLC	317.1
Envortus, Inc.	311.12
NRG Energy, Inc.	309.8
Timberland Harvesters, LLC	302.22
Railex Merchant Energy Group	205.96
Horizon Energy Group <sup>[1]</sup>	0
Krebs & Sisler <sup>[2]</sup>	0
[1] Bidder did not meet criteria for allowable fuels	
[2] Bidder did not meet demonstrated technology cr	it eria

same categories. However, the weighting of the criteria was changed from the evaluation of the initial

proposals to the evaluation of the binding proposals. The evaluation criteria and weighting for the binding proposals are shown in the adjacent table.<sup>125</sup>

As we would expect, the binding proposals were evaluated with a higher weighting placed on the economics of the proposed projects relative to the environmental or risk and reliability attributes.

Criteria Criteria Weight Category/Criteria Weight (Revised) 1. Economics: Cost Effective Renewable Capacity and/or Energy Benefits 10.00 25.00 a) Project All-in Production Cost b) Project Variable Production Costs 8.00 5.00 7.00 e) Fuel Requirements and Sources 3.00 f) Anticipated Project In-Service Date and/or Energy Delivery 4.00 4.00n) Local Economic Impact 2.00 3.00 31.00 40.00 **Category Total** 2. Environmental: Attributes Consistent with the Gainsville Community d) Environmental Emissions 10.00 10.00 g) Project Commitment to Sustainable Forest Resource Management 10.00 7.00 m) By-product/Waste Production and Disposition 8.00 8.00 5.00 h) Project Site Requirements 6.00 **Category Total** 34.00 30.00 3. Risk & Reliability: Enhanced and Reliable Energy Supply 10.00 10.00 k) Proposed Contractual Terms and Conditions 9.00 5.00 c) Technology Readiness and Project Reliability 6.00 5.00 j) Experience and Resources of Project Developer/Sponsor i) Project Size and Design 5.00 5.00 l) Proposer's Financial Strength 5.00 5.00 **Category Total** 35.00 30.00

<sup>&</sup>lt;sup>125</sup> Attachment D: Summary Table for GRU Biomass RFP Evaluation, 1/3/2008, General Manager Regular Item# 070808; Commission Approved Factor Weights for Binding Responses to GRU Biomass RFP No. 2007-135, Approved 3/24/2008

Based on the foregoing criteria, GRU Staff evaluated the three binding proposals submitted by Sterling Planet, Covanta and Nacogdoches Power. The resultant final scores are provided in the table below.

Respondent	Criteria Ranking (Original Proposal)	Criteria Ranking (Binding Proposal)	% Chg.
Sterling Planet (30 MW PPA)	363.78	327.42	-10%
Covanta (50 MW PPA)	348.42	356.60	2%
Covanta (50 MW EPC)	n/a	367.10	-
Nacogdoches Power, LLC	341.50	432.20	27%

As displayed in the table above, there was a significant change in the rankings from the initial proposals with Sterling Planet's score declining by approximately 10% and Nacogdoches Power's score increasing by over 27%, resulting in it having the highest final score.

While in our opinion the re-weighting of criteria was not unusual, we noted a substantive, and relatively unsupported, change in the scoring on certain criteria that substantially improved the ratings of Nacogdoches Power over the other two finalists, especially given that there were not significant changes between the initial and binding proposals submitted by the respective bidders. Nacogdoches Power's original and revised scoring where significant differences (i.e., increases) in their scores resulted is summarized in the table below:

	Criteria	Criteria	Weighted	Weighted	
Category/Criteria - Nacogdoches Power	Score (Original)	Score (Revised)	Score (Original)	Score (Revised)	%Cho
	(Oliginal)	(Iteviseu)	(Oliginal)	(Iteviseu)	/oeng.
1. Economics: Cost Effective Renewable Capacity and/or Energy Benefits					
a) Project All-in Production Cost	2.55	4.21	25.50	105.25	313%
f) Anticipated Project In-Service Date and/or Energy Delivery	1.00	4.67	4.00	18.68	367%
n) Local Economic Impact	4.00	5.00	8.00	15.00	88%
Category Total	17.55	21.73	112.50	170.68	52%
2. Environmental: Attributes Consistent with the Gainsville Community					
m) By-product/Waste Production and Disposition	1.00	4.44	8.00	35.52	344%
h) Project Site Requirements	1.00	5.00	6.00	25.00	317%
Category Total	9.40	17.67	88.00	127.82	45%
3. Risk & Reliability: Enhanced and Reliable Energy Supply					
l) Proposer's Financial Strength	1.00	4.64	5.00	23.20	364%
Category Total	18.80	21.74	141.00	133.70	-5%
	То	otal	341.5	432.2	27%

In recognition of Nacogdoches Power achieving the highest score, the City Commission authorized the General Manager to negotiate a PPA with Nacogdoches Power with the caveat that in the event that "the General Manager is unable to negotiate an acceptable contract with the highest ranked proposer, the General Manager /Designee may then negotiate with the next highest ranked proposer."<sup>126</sup>

<sup>&</sup>lt;sup>126</sup> City of Gainesville, City Commission Meeting Minutes, May 12, 2008

As discussed, the failure of GRU's RFP process to include: 1) a preferred PPA, 2) a date through which a bidder must maintain its pricing, 3) a specific size or capacity, and 4) ratepayer impact in the evaluation criteria were major shortcomings. However, while lacking in some aspects, GRU's procurement was otherwise quite solid. Its two step approach with Step 1 representing indicative proposals and Step 2 comprising binding proposals is a preferred means for managing a procurement process and culling out sub-optimal proposals. In addition, GRU's Three Category (Economics, Environmental and Risk & Reliability) with multiple weighted criteria is an effective approach to conducting evaluations of proposals. In conclusion, while we have raised questions and found the RFI/RFP process lacking in some areas, the GRU evaluation process employed for evaluating the RFP responses was generally sound, and, while detrimental to GRU's negotiating efforts, not the primary reason for the observed deficiencies in the PPA, which are discussed later in this Report.

5. Investigation of the Equitable Adjustment to the PPA

In October 2013, the existence of the Equitable Adjustment, which had been executed in March 2011, was brought to the attention of the City Commission.<sup>127</sup> Under the Equitable Adjustment, GRU and GREC agreed that FDEP and the EPA had "imposed changes upon the design and operation of the [biomass] Facility" that increased the actual costs to GREC in generating and selling power from the facility.<sup>128</sup> More specifically, GREC contended, based on discussions with representatives from FDEP, that significant "regulatory and permit changes" required GREC to re-design the biomass facility that would result in "both additional capital and operating costs for the facility."<sup>129</sup> The specific re-design in question was a change from an aqueous ammonia injection system based on Selective Non-Catalytic Reduction (SNCR) to one based on a Selective Catalytic Reduction (SCR) system to provide for better control and more limited emissions of nitrogen oxides (NOx), and modifications to associated air quality control systems.

The Equitable Adjustment is "expected to result in increased costs to GRU under the PPA of approximately \$3.5 million annually or \$105 million over the 30 year contract term" and the "construction of the reclaimed water pipeline added a one-time cost of approximately \$1.1 million."<sup>130</sup> However, despite apparent discussions between GRU and GREC as to the change from a SNCR to a SCR, and negotiations between them in 2010 regarding the Equitable Adjustment, its existence remained largely unknown to the City Commission and other City staff.

As such, at the request of the City Commission, the City Attorney undertook an investigation into the circumstances surrounding the negotiation and execution of the Equitable Adjustment and whether its execution constituted an "ultra vires" (i.e., unauthorized) act by the then General Manager, Mr. Hunzinger. However, upon limited review, the City Attorney concluded that while the Equitable Adjustment was an "ultra vires" or unauthorized act, legal action would not likely be successful

 <sup>&</sup>lt;sup>127</sup> Equitable Adjustment for Change of Law, executed by James S. Gordon as President of GREC and Jennifer L.
 Hunt, Chief Financial Officer, on behalf of Robert E. Hunzinger, General Manager

<sup>128</sup> Ibid

<sup>&</sup>lt;sup>129</sup> Memorandum from American Renewables to GRU, RE: Changes in Regulatory Environment, Date: November 15, 2010

<sup>&</sup>lt;sup>130</sup> City of Gainesville Request for Proposals for External Investigative Review of Gainesville Regional Utilities, Section I – Request for Proposal Overview & Proposal Procedures, Subsection A. Introduction / Background, dated April 10, 2014

because the City had been given notice as a complete and un-redacted copy of the PPA, with the Equitable Adjustment attached, had been provided to the City in April 2011.<sup>131</sup>

a) The Decision to Change to a SCR System was in Late 2009

According to Appendix I (Facility) of the PPA, the GREC facility would include an aqueous ammonia SNCR system to provide emission controls for NOx.<sup>132</sup> However, in May 2009, shortly after the PPA had been executed, GREC reportedly met with staff members of FDEP to discuss the PSD air permit application that GREC planned to file for the biomass generating facility. In reviewing the merits of a PSD application, FDEP applies a standard referred to as Best Available Control Technology ("BACT"). According to GREC, the FDEP staff indicated that a SCR system, rather than GREC's proposed SNCR, would constitute BACT.

While it does not appear that there was a formal ruling by FDEP on this matter, when the particular FDEP staff member reiterated his position that a SCR would be preferred, the decision was made by GREC, with apparent concurrence from GRU, to redesign the proposed biomass facility to incorporate the more expensive SCR system. While the related Equitable Adjustment was not approved until March 2011, the apparent decision was made in late 2009 as is evident from various emails reviewed during the course of the Investigative Review, and as referenced by GREC in an email from Josh Levine to Ed Regan on June 17, 2010. A summary timeline of relevant information related to the decision to change from a SNCR to a SCR is summarized below:

5/12/2009	GREC reportedly meets with FDEP to begin discussing the Site Certification Application ("SCA") and Prevention of Significant Deterioration ("PSD") permit applications that GREC is planning to file in the fall of 2009 (attended by GREC personnel Jeff Koerner, David Read, Al Linero, and Mike Halpin). It was reported that Mr. Linero suggested [emphasis added] for the first time that GREC would need to make a very strong argument if it wished to persuade FDEP that the utilization of SNCR is BACT. No GRU personnel appear to have been present at this meeting. <sup>133</sup>
6/24/2009	GREC reportedly holds a pre-application scoping meeting with FDEP. It was reported that Mr. Linero again raised the issue that, in his opinion, SNCR with a 0.10 lb/mmBtu NOx emission limit is not BACT and that GREC would need to strongly consider using SCR. No GRU personnel appear to have been at this meeting. <sup>134</sup>
6/25/2009	Email from Ed Regan to Josh Levine, Subject: Re: Confidential Agreement – stating "I was discussing the whole BACT issue with Rob Klemans, our environmental compliance manager. He has some ideas given that we will soon be generating an excess of NOx allowances, perhaps some permit offsets? Obviously the best case is to get okay'd on SNCR."

 <sup>&</sup>lt;sup>131</sup> Memorandum, From: Nicolle M. Shalley, City Attorney, To: Mayor and City Commission, Subject: Equitable Adjustment for Change of Law of the Power Purchase Agreement, Date: December 19, 2013
 <sup>132</sup> H : 1

132 Ibid

<sup>&</sup>lt;sup>133</sup> Memorandum from Josh Levine and Len Fagan, American Renewables, to Bob Hunzinger, Ed Regan and John Stanton, Re: Changes in Regulatory Environment, Dated: November 15, 2010

<sup>134</sup> Ibid

6/26/2009	Email from Josh Levine to Ed Regan with Cc: to Robert Klemans and Schef Wright, Subject: RE: Confidentiality Agreement – stating "I will definitely get in touch with Rob to discuss the BACT issue with him. We had our pre-application meeting with FDEP on Wed. afternoon and it went well. I can give you some more information later."
July - Aug 2009	GREC stated that it evaluated two options to reconfigure the facility: i) reconfigure the BFB boiler to a CFB boiler while still using an SNCR (this option could achieve NOx emission limit of .07 lb/mmBtu, but no lower), or ii) stick with BFB boiler and shift to SCR. <sup>135</sup>
	GREC reported that it decided to go with the second option since they claim " <i>GRU</i> has been clear in terms of its strong desire to begin construction as soon as possible to be able to take advantage of federal stimulus funds."
	GREC also stated that Metso estimated at the time that this change would cost approximately \$10 million extra in capital costs and increase operating costs.
August 2009	GREC recounted that a discussion was held between Josh Levine and Ed Regan regarding the change in regulatory requirements that necessitated making a change from an SNCR to SCR, and that the necessary changes would entail additional costs not anticipated in the original configuration. The approximate cost impacts also reportedly were discussed, as well as the fact that GREC believed the change constituted a "change in law" as defined by Section 3.2 of the PPA. <sup>136</sup>
	GREC also recounted that Ed Regan reported back that "the GRU team discussed the situation and agreed that this change from an SNCR to an SCR was appropriate and necessary, would constitute a 'change in law' under the terms of the PPA [emphasis added], and that some re-evaluation and adjustment of the Contract Prices between the Parties would need to occur at some appropriate point in the future." <sup>137</sup>
	At a later date in relation to these comments (i.e., the June 17, 2010 email), Mr. Regan confirmed that this was the verbal agreement they accepted. <sup>138</sup>
9/18/2009	The Joint Petition to Determine Need application filed by GREC and GRU included language stating that "An aqueous ammonia injection selective non-catayltic reduction (SNCR) or a selective catalytic reduction (SCR) system will be provided for NOx control" – Direct Testimony of Joshua H. Levine, September 19, 2009
10/5/2009	In an email from Josh Levine to Ed Regan regarding a presentation on biomass to the City Commission, Mr. Levine includes excerpts of the Determination of Need application, stating it was "slightly modified concerning the SCR language." Mr. Levine goes on to write "An aqueous ammonia injection selective catalytic reduction (SCR) system will be provided for NOx control" with no mention of the SNCR.

<sup>135</sup> Ibid

<sup>&</sup>lt;sup>136</sup> Email from Josh Levine to Ed Regan, Subject: GREC and GRU emissions netting proposal, Dated: June 17, 2010

<sup>137</sup> Ibid

<sup>&</sup>lt;sup>138</sup> Email from Ed Regan to Skip Manasco, Subject: FW: GREC and GRU emissions netting proposal, Dated: November 18, 2010

11/30/2009	GREC files both its SCA and PSD permit application proposing the use of the SCR system with a NOx emission limit of .07 lb/mmBtu.
1/20/2010	Email from Josh Levine to Roger Westphal, Subject: RE: Power Engineering – Biomass conversions could be affected by proposed EPA rule – commenting on the article, Mr. Levine states "I agree with your conclusion that we should be in decent shape with the BFB boiler with an SCR."
3/24/2010	Email from Josh Levine to Kathy Viehe and Robert Klemans with Cc: to Ed Regan, Subject: Re: Emissions info – comparing the emissions from Deerhaven 2 and GREC – stating that "GREC will also utilize a baghouse and SCR."
3/29/2010	Email from Josh Levine to George Cavros and Ed Regan, with Cc: to Al Morales, Kathy Viehe and Lewis Walton attaching various documents regarding the GREC project – stating "In terms of information on the air emissions of GREC, we will be employing a state-of-the-art bubbling fluidized bed (BFB) boiler from Metso, which includes a selective catalyst reduction (SCR) to control NOx emissions"
August 2010	Mr. Linero testified in the Site Certification hearing that during GREC's pre- application meetings he had told GREC that it ought to consider using an SCR system instead of an SNCR.

b) FDEP Suggests Netting Emissions between GRU and GREC

In mid-2010, a suggestion is made, apparently by FDEP representative Al Linero, that GREC may be able to better address some of the potential permitting challenges in relation to control over its emissions by agreeing to cap certain emissions at GRU's Deerhaven 2 unit, which had recently installed new pollution control equipment. However, while it was believed that this so-called "netting" of emissions could provide significant benefits to GREC, the impact to GRU was more unclear, as it primarily would limit the amount of emissions from GRU's facility. A summary of applicable information and email discussions regarding the netting proposal is provided below

6/8/2010	GREC recounts a discussion between Mr. Linero and Tom Davis of ECT, where Mr.
	Linero stated that if he were to conduct a BACT analysis for NOx emissions for GREC,
	as he was required to do since GREC's application indicated the facility would be a
	major source of NOx, "it would delay the issuance of the draft air construction permit"
	[emphasis added]. Mr. Linero then suggested that if GREC were able to work with
	GRU to agree to a cap on GRU's NOx and SO2 emissions from Deerhaven 2that
	FDEP would not need to conduct a BACT analysis for NOx and SO2 for GREC and
	they would accept GREC's proposed limitsas "BACT-like." <sup>139</sup>
6/15/2010	Email from Josh Levine to Ed Regan and Rob Klemans attaching the draft air permit
	that would be issued to GREC in the event that GRU requests PSD netting for GREC.
	The email thread includes an email from Tom Davis to Bob Donahoe, David S. Dee,
	Jack Doolittle, Josh Levine and Len Fagan stating that "should the GRU PSD netting
	AC permit be challenged, Al indicated that he would have to pursue the alternative of
	establishing NOx and SO2 BACT limits for GREC."
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<sup>&</sup>lt;sup>139</sup> Memorandum from Josh Levine and Len Fagan, American Renewables, to Bob Hunzinger, Ed Regan and John Stanton, Re: Changes in Regulatory Environment, Dated: November 15, 2010

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6/16/2010	Email from Josh Levine to Ed Regan and Robert Klemans, Subject: Draft air permit documents – stating "As you can see, he is ready and willing to kick this offif we can get agreement from GRU on this netting issue today or tomorrow, we should be in a good position."
6/16/2010	Email from Tom Davis to Alvaro Linero, Subject: GRU DGS Unit 2 Emission Caps – attaching proposed emission caps for DH2 for netting proposal and stating "After your reviewplease let me know whether the analysis and proposed DGS Unit 2 emission caps are acceptable."
6/18/2010	Email from Alvaro Linero to Tom Davis, Subject: RE: GRU DGS Unit 2 Emission Caps – responding "Feel free to submit application per described basis."
6/18/2010	Email from John Stanton to Josh Levine, Subject: RE: DGS Unit 2 Emission Caps – FDEP Application Submittal Letter – stating "I'm willing to do this [netting proposal] as I believe it is in our best interests. However, that does not mean I believe that a change in BACT constitutes a 'Change in Law' as defined in the PPA" [emphasis added].
6/18/2010	Email from Robert Klemans to Skip Manasco, Subject: Fwd: DGS Unit 2 Emissions Caps – FDEP Application Submittal Letter – forwarding the email exchange between John Stanton and Josh Levine as an "FYI."
6/18/2010	Email from Al Linero to other staff within FDEP stating that the request for emissions caps was "Just an action at a unit that underwent PSD review years ago and will take a cap on NOx and SO2 lower than present limits of past actual emissions. By this action, a separate project for a new biomass unit presently under review (called Gainesville Renewable Energy Center) will not trigger PSD (though it will meet BACT-level emissions limits)" [emphasis added].
7/14/2010	FDEP issued GREC a draft air construction permit
12/28/2010	Final Permit issued by FDEP

c) GREC Requests Equitable Adjustment in the PPA Due to Change in Law

In June 2010, as its efforts regarding the GREC SCA and PSD permitting processes were in their final stages, GREC summarized (in a lengthy email from Josh Levine to Ed Regan) its justification for why the additional costs expected in the change to the SCR should be covered under the PPA (i.e., necessitate a reevaluation of the negotiated prices under the PPA).<sup>140</sup>

The PPA includes a "Change in Law" provision. A Change in Law is defined as a change in any applicable law, regulation, permit, ordinance, market rule, or order of any governmental or regulating authority, market regulator, court, or arbitration tribunal enacted after the Effective Date where such change in law specifically increases or decreases the actual cost of generating and selling the Products, but it shall not include any such change in law that is not specifically directed toward generating facilities or which just has general economic effects that indirectly increase or decrease Seller's costs.

<sup>&</sup>lt;sup>140</sup> Email from Josh Levine to Ed Regan, Subject: GREC and GRU emissions netting proposal, Dated: June 17, 2010

The PPA provides that in the event of a Change in Law, the PPA prices shall be equitably adjusted to cover the additional costs or pass on the additional savings.

The proposal, as well as the estimated costs to GRU, prompted concerns from various individuals at GRU, as well as requests for independent assessments of both the applicability of the Change in Law provision in the contract to these circumstances, and the reasonableness of the estimated costs provided by GREC. However, despite significant opinions in opposition, GRU executed an Equitable Adjustment with GREC on March 16, 2011 amending the PPA to accommodate the estimated additional capital costs increased annual operating costs. A timeline of relevant emails and memoranda related to GREC's contention that the change to the SCR was a "Change in Law," and subsequent reaction and efforts by GRU to evaluate GREC's contention, is provided below:

6/17/2010	Email from Josh Levine to Ed Regan RE: GREC and GRU emissions netting proposal – providing, among other things, a historical recap of their discussions regarding the change from an SNCR to an SCR stating "We had discussed that utilizing a SCR rather than an SNCR would result in approximately an additional \$10 million in capital costs for us, along with additional operating expenses" and that they believed that "this type of change would constitute a "change in law".
	And, discussing that they recognized that in agreeing to this netting proposal, GRU would potentially be exposing themselves to operating constraints in the future and, in recognition of this potential downside to GRU, AR was willing to agree to i) GREC would give GRU the first right to sell any environmental allowances to GREC at a market rate, ii) the only "change in law" they would present to GRU would be with respect to the change from an SNCR to an SCR as discussed back in August 2009. However, if GRU elects to have GREC finance the proposed reclaimed water pipeline to Alachua, this would be another "change in law" that would need to be considered. GREC would not be seeking an additional charge in the PPA contract prices due to any situation involving the cost of purchasing reclaimed water or for any fee associated with receiving reclaimed water.
	GREC was willing to agree to not seek any increase in the PPA contract prices related to the reclaimed water issue if, in turn, GRU agreed to finance the reclaimed water pipeline from GREC to Alachua's reclaimed water system.
9/16/2010	Email from Ed Regan to Douglas Roberts and Skip Manasco with Cc: to Robert Klemans, Subject: FW: GREC and GRU emissions netting proposal – forwarding the June 17, 2010 email from Josh Levine to Ed Regan summarizing the timeline and decision process with regard to the change from an SNCR to an SCR, among other things, with Mr. Regan's comment that "This is the deal which we accepted verbally" [emphasis added].
10/19/2010	Reported meeting between American Renewables and GRU management, believed to have included Messrs. Regan, Hunzinger and Stanton to discuss GREC's claimed changes in the regulatory and permit requirements resulting in the claimed "change in law." <sup>141</sup>

<sup>&</sup>lt;sup>141</sup> Memorandum from Josh Levine and Len Fagan to Bob Hunzinger, Ed Regan and John Stanton, Dated: November 15, 2010, Re: Changes in Regulatory Environment

11/1/2010	Email from Ed Regan to Myron Rollins, Subject: RE: PDF of Initial Brief in SC10-1512 stating – "Myron – We are in the first phases of truing up costs with GREC due to change of law design changes. When I get more technical specifications – can I get an independent cost estimate for the SCR, upsized baghouse, and dry sorbent injection? Obviously I'll pay and a not to exceed number would be nice" [emphasis added].
11/4/2010	Email from Ed Regan to John Stanton, Subject: RE: PDF of Initial Brief in SC10-1512, forwarding the 11/1/10 email between Mr. Regan and Mr. Rollins asking "John – I'm interested in your thoughts on this – maybe we should use Burns and Mac instead. I am lining up another opinion from Evonik."
11/5/2010	Email from John Stanton to Ed Regan (with copy to Robert Hunzinger and Skip Manasco), Subject: RE: PDF of Initial Brief in SC10-1512 – in reply to stating
	"HOWEVER, I'm not convinced that we need to pay them anything. I think we should really play hardball on the change of law thing. You know my position: if they can't show me a piece of paper with the "law" in effect at contract closing and a revised "law" currently in effect, there has been no change. Moreover, they are whining about the environmental rules making the go from NSCR to SCR. I see the "law" as the requirement to use BACT. That was the law then, it's the law now. The definition "BEST AVAILABLE Control Technology" is always changing. These guys are professional power plant developers. They have been doing this for 20 years and have seen technology evolve. If they guessed that it would be the same in Florida in 2010 as it was in Texas 2007 then they guessed wrongthat's the price of doing business" [emphasis added].
	In the same email, Mr. Stanton reiterates that GRU's agreement to modify the air permit did not mean [it] agreed that there had been a change in law."
11/1-9, 2010	Emails from Ed Regan to various external consultants seeking an independent assessment of the proposed costs resulting from change from an SNCR to an SCR, upsized baghouse, and dry sorbent injection.
11/15/2010	Memorandum from Josh Levine and Len Fagan to Bob Hunzinger, Ed Regan and John Stanton Re: Changes in Regulatory Environment – "seeking at this time to formalize the verbal agreement we had to make appropriate changes to the Contract Prices at some time in the future in connection with the SCR-related changes" [emphasis added]. Estimated costs related to the claimed "change in law" were now estimated to be \$16,450,050 in capital costs and \$1,775,000 in annual operating costs.
11/16/2010	Email from Ed Regan to Jonathan Cole, Orrick, Herrington & Sutcliffe LLP copying Messrs. Manasco, Hunzinger and Stanton – forwarding the November 15, 2010 memorandum from GREC and stating "As is amply described in the attached memorandum, getting the GREC facility permitted under BACT has required additional air pollution control investment, and the attached memorandum is a settlement proposed by American Renewables. I would be very much interested in your assessment of whether or not you would consider Section 3.2 applicable under the circumstances [emphasis added]."
11/18/2010	Email from Jonathan Cole to Ed Regan, Subject: RE: Section 3.2 of GREC PPA – saying that Carl Lyon and he would discuss the change of law issue in more detail before getting back to Mr. Regan, which they hoped to do on Thursday (November 25).

11/18/2010	Email from Ed Regan to Skip Manasco, Subject: FW: GREC and GRU emissions netting proposal – forwarding again Josh Levine's email of 6/17/2010 with comment from Mr. Regan that "Here is the deal we accepted verbally" [emphasis added].
12/1/2010	Email from Skip Manasco to Robert Hunzinger, Ed Regan and John Stanton, Subject: GREC PPA "Change in Law" – stating that he had requested Orrick provide an evaluation of the change in law issue, and that he expected the results could be available in about 10 days.
12/8/2010	Email from Carl Lyon of Orrick to Skip Manasco, Subject: Change in law – - stating "our environmental people have concluded that there was no change in law with respect to the requirement of an SCR. They are preparing a short memo on this and our litigators are now looking at the other related issues" [emphasis added].
12/9/2010	Email from Skip Manasco to Peter Coll at Orrick with Cc: Carl Lyon, Robert Hunzinger and Ed Regan, Subject: Change in law; GRU/GREC PPA – stating "While the day-to-day contacts between GRU and GREC are generally between Ed Regan and members of the GREC team, it should have been obvious to all of themthat Bob Hunzinger must approve all substantive terms and must also submit them to the City Commission for approval."
12/20/2010	Formal memo issued by Orrick concluding that "there was, quite simply, no change in law" [emphasis added].
12/28/2010	Final Permit issued by FDEP
1/17/2011	Letter from Christopher Bowman, Development Engineer, Burns & McDonnell to Ed Regan Re: SCR and Baghouse Cost and Performance Review – stating the purpose of the study is "to provide GRU with sufficient order of magnitude information to determine if the cost and performance impacts for adding the SCR system to the GREC are reasonable. The report lists the \$16,450,050 estimated capital cost impact of the SCR prepared by GREC, and provides an estimate by Burns & McDonnell of adding the SCR and associated air quality control system (ACQS) modifications at \$22,200,000. Burns & McDonnell observes that the GREC estimated cost increase is "considered low but not unfeasible." The Burns & McDonnell report further estimated the annual operation and maintenance (O&M) cost impact for the SCR at \$1,755,000 per year. Overall, Burns & McDonnell concluded that the "increase in capital cost, O&M cost, auxiliary load, plant heat rate, and biomass fuel consumption were found to be reasonable based on the information made available"
1/18/2011	Email from John Stanton to Ed Regan and Skip Manasco, Subject: indicating that he "emphatically" felt that AR/GREC's change in law position does not have merit.
3/15/2011	Memorandum from Josh Levine to Robert Hunzinger, Ed Regan and Raymond Manasco Re: Equitable Adjustment of GREC PPA per Section 3.2 – providing written notification "of a claim for extra compensation due to a change in the regulatory requirements for generating and selling the Products, as defined in the PPA."
3/15/2011	Email from Josh Levine to Ed Regan and Skip Manasco, Subject: GREC Equitable Adjustment agreement – attaching a draft of the Equitable Adjustment that the GREC team drafted. He states that they "tried to incorporate everything that you and I discussed last week and yesterday on the phone."

V. Review of Decision-Making - RFP to Equitable Adjustment

3/16/2011	Email from Josh Levine to Ed Regan and Skip Manasco attaching a "revised draft" of the Equitable Adjustment and stating that it should reflect all of the comments from Messrs. Manasco and Regan.
3/16/2011	Email from Ed Regan and Skip Manasco responding to Josh Levine's email individually indicating that they approve of the revised draft.
3/16/2011	The Equitable Adjustment for Change of Law is executed by James S. Gordon and Jennifer L. Hunt (for Robert E. Hunzinger)

#### d) Communication Regarding the Equitable Adjustment

While the various memoranda, positions and opinions with regard to the questioned "Change in Law" do not appear to have been contemporaneously provided or communicated to the City Commission, or other City staff, the existence of the amendment to the PPA for the Equitable Adjustment, along with the complete un-redacted version of the PPA, was released on April 6, 2011. In addition, the impact of the change to the costs in the PPA also was communicated by Mr. Regan to various outside parties, as well as questioned by certain citizens. However, it appears when prompted for further information on the circumstances leading to the change in the PPA from the Equitable Adjustment, information does not appear to have been forthcoming until much later. A timeline of communications related to the Equitable Adjustment after its execution on March 16, 2011 is provided in the table below:

4/6/2011	GRU e-line news release was sent via email to the City Commission and the news media – discussing the release of the un-redacted PPA and stating "GRU was also able to release today an adjustment to the power purchase agreement that addresses negotiated costs associated with recent changes in federal environmental regulations and state permitting requirements. <b>Hunzinger states that the changes will have minimal impact on customers</b> ."
4/6/2011	Emails from Ed Regan to individuals at the Orlando Utilities Commission (OUC), Jackson Electric Authority (JEA) and Lakeland Electric, Subject: FW: Biomass power news: American Renewables Removes Confidentiality Requirement for Biomass Contract – seeking interest regarding the resale of power from the GREC contract, and discussing the impact of the change from an SNCR to an SCR. Mr. Regan stated "The pricing effect of these changes has been negotiated pursuant to Section 3.2 of the PPA (Change of Law). The negotiated price for these changes was an additional \$4.40 per MWH, fixed over the 30 year term of the contract. You may recall a unique feature of the contract is the 30 year fixed price per most of the \$/MWH charge (take and pay) and the absence of any kw/month charges."
11/16/2011	Email from Dian Deevey to Rita Strother, Subject: RE: Clarification of request for claim for equitable adjustment – requesting information on the claim for equitable adjustment citing "According to the Power Purchase Agreement (PPA) with American Renewables/GREC the price of the power to be purchased was raised from \$50 to \$54.40 per MWh, in accordance with provision in contract Section 3.2 that allows increases in the cost of building the plant due to changes in law."
11/21/2011	Email from Rita Strother to Dian Deevey, Subject: RE: Clarification of request for claim for equitable adjustment – responding to Ms. Deevey's request stating "I just spoke

	with the Utilities Attorney and she is currently having discussions with American Renewables/GREC about releasing the documents that fit your request."
2/15/2012	Email from Dian Deevey to Kurt Lannon, Subject: FW: GRU notification of increase in Biomass contract cost – seeking public records request for information related to when the Equitable Adjustment was brought before the City Commission, which is subsequently forwarded to Bob Hunzinger, Ed Regan, Kathy Viehe, Lewis Walton, Shayla McNeill and Jennifer Hunt.
10/8/2013	Email from Carl Lyon of Orrick to Robert Hunzinger, Subject: Randy Wells – stating "We need to talk Tuesday. After the meeting Randy came up and said he understood we had written a memo that said GRU did not have to pay for the reclaimed water line. I told him we had not written such a memo. He then said maybe he was not asking the right question and was there anything else like that. There were people around and I managed to change the subject without answeringI don't see how to avoid acknowledging the change in law memo" [emphasis added].
1/14/2014	Email from John Stanton to Al Morales with Cc: to Shayla McNeill and Kathy Viehe – stating GRU's position that the Equitable Adjustment amount of \$4.40 per MWh was subject to a "true up" as both the PPA and Equitable Adjustment "clearly contemplate GRU compensating GREC for the additional actual costs incurred by the Change in Law."
7/16/2014	Letter from Len Fagan, American Renewables to Christopher Kirts, Florida Department of Environmental Protection, Re: Gainesville Renewable Energy Center, LLC (GREC) Air Permit No. 0010131-003-AC (PSC-FL-411) – stating "The Department's permit for GREC shows that this emission limit was requested by GREC during the permitting process; it is not a BACT requirement" [emphasis added]. And, that "When considering these issues, please remember that GREC is the only operating biomass-fired facility in the United States that uses an SCR control device to control NOx emissions."

e) The Equitable Adjustment Added Significant Cost and Risk

The issues regarding the potential change to the SCR system seemed to surface within a matter of weeks after the PPA was approved by the City Commission in May 2009. However, the full disclosure of the reasons for the change and its impact relative to the PPA and the PPA costs, don't appear to have occurred until over four years later. The decision to change components in the proposed GREC facility also appears to have been made by GREC before the end of 2009, based primarily on suggestions and comments made by one particular individual at FDEP, and certainly before any formal communication or position with regard to the GREC PSD permit application. Significant evidence also exists to support that the change in the facility design was fully known, and communicated, including information contained in the SCA and PSD permit applications made in November 2009. In addition, the decision appears to have been discussed and evaluated with various individuals at GRU, and was with their concurrence.

Despite assertions by GREC that "after we executed the PPA and began the permitting process for GREC, the regulatory requirements, as interpreted and imposed by FDEP were changed" we have not

identified conclusive evidence that such was the case.<sup>142</sup> First, as GREC asserts, the regulatory requirements would have had to have changed within a few days of the City Commission's May 9, 2009 approval of the PPA and the May 12, 2009 meeting between GREC and representatives of FDEP where the reported position initially was taken by FDEP that utilization of SNCR was not BACT.

Further, we have been unable to reconcile the representations by GREC with the information reviewed including questions related to GREC's ultimate avoidance of a BACT review that was the primary basis of their initial concerns. Much of GREC's memorandum provided in support of its justification that the change was a "change in law" focused on what emissions control technology they believed FDEP would interpret as BACT and inferences by FDEP that they would not consider SNCR as BACT. However, also as pointed out in GREC's memorandum, because GRU ultimately agreed to a cap on their emissions FDEP did not need to conduct a BACT analysis. And, per a statement made by Len Fagan in 2014 where he acknowledged that "this emission limit was requested by GREC during the permitting process; it is not a BACT requirement" and that "GREC is the only operating biomass-fired facility in the United States that uses an SCR control device to control NOx emissions."

We also have reviewed the various memoranda and opinions provided in review of the Equitable Adjustment by inside and outside counsel related to whether the circumstances as described constituted either a "Change in Law" under the contract, or whether Mr. Regan, and subsequently Mr. Hunzinger, had the requisite authority to bind the City to the change. Based on our review of information and prior experience with PPA negotiations, and subsequent claims under a Change in Law provision, we have seen no evidence that would support a different conclusion than those reached by Orrick, Herrington & Sutcliffe LLP, the City Attorney, or the opinions originally expressed by Mr. Stanton in this regard.

However, we stop short from taking the position that the change from the SNCR to the SCR was not a prudent decision, or that ultimately the decision did not facilitate and streamline the permitting process with FDEP. We understand that a prolonged permitting process was a significant concern for both GRU and GREC, and that such a process may not have been beneficial to the mutual interests of both parties given the timetable for permitting and start of construction needed by the facility to potentially qualify for certain federal and/or state tax incentives. In addition, it is important to point out that the decision to change to the SCR was made before the evaluation of the applicability of the Change in Law provision and, regardless of whether the changes resulted from a Change in Law, a decision appears to have been jointly made, and subsequently acknowledged by GRU Senior Management, to make this change.

While we do not raise significant questions regarding the ultimate decision, in our opinion the decision-making process suffered from significant failures including: 1) GRU's failure to timely request from GREC, and evaluate, the potential impact to GREC's capital costs and annual operating costs and their potential impact on the PPA, 2) the failure to participate in meetings with FDEP leaving them subject to the interpretations and representations of GREC as to the content and direction of FDEP's positions, 3) the failure to keep the City Commission apprised of the change in 2009, and that it may require an amendment to the contract, 4) the failure to seek approval of the Equitable Adjustment from

<sup>&</sup>lt;sup>142</sup> Memorandum from Josh Levine and Len Fagan to Bob Hunzinger, Ed Regan and John Stanton, Dated: November 15, 2010, Re: Changes in Regulatory Environment

the City Commission, if only for the purpose of avoiding the surprise that occurred in 2013, and 5) the failure to effectively respond to questions regarding the Equitable Adjustment when first posed by a Gainesville citizen in 2011.

Lacking any formal change control process in relation to the PPA, the discussions between GREC and GRU throughout much of the first two years after execution of the contract appear to have been treated basically as just that, "discussions." Although GREC may have relied on the outcome of those discussions, GRU should have instituted a more formal evaluation of the need for the proposed change (including through the use of third-party advice if warranted), a more formal request for the potential cost impacts of the proposed change, and a more formal negotiation and approval process.

We also are concerned by the actions of GREC that failed to provide more information regarding the potential costs of the change until substantially after GREC's permitting had already been filed and negotiated with FDEP, and after GREC had received draft permits thereby severely limiting GRU's ability to question the ultimate decision before they were essentially confirmed.

#### VI. Assessment of the PPA with GREC

#### A. Introduction

The initial draft of the PPA was received by GRU from Nacogdoches Power on June 23, 2008; more than one month after the project was selected.<sup>143</sup> From June 2008 until the end of April 2009, when the final PPA was executed, the parties conducted negotiations with regard to the PPA. The negotiations produced eight formal drafts between the initial draft PPA and the final executed PPA. Over the course of the negotiations, various components of the binding proposal received from Nacogdoches Power were changed or eliminated including:

- The PPA term was extended from 20 to 30 years;
- The Take-or-Pay arrangement in Nacogdoches Power's binding proposal was changed to the Take-and-Pay structure preferred by GRU in the RFP;
- GRU's Right-of-First-Refusal in relation to a future sale of the facility was changed to a Right-of-First-Offer concept;
- GRU's right to Terminate for Convenience was eliminated;
- A significant increase in pricing resulting in total nominal non-fuel payments to GREC increasing from \$936 million pursuant to GREC's binding proposal to more than \$1.9 billion pursuant to the pricing incorporated in the executed PPA; and
- Various risks were shifted from GREC to GRU, as described below.

In essence, the substantive changes from the preferred terms of the RFP and the binding proposal submitted by GREC resulted in:

- Pricing that was substantially higher;
- A contract term that was extended by ten-years, and
- No opportunity for GRU to either terminate the contract prior to construction, or to acquire the facility prior to the 29<sup>th</sup> year of the PPA (other than through contract default).

A summary timeline of key events surrounding the approval, permitting and start of operations of the GREC facility is provided below:

May 2008	GREC was awarded the right to solely negotiate a PPA with GRU
June 2008	GREC submits its draft PPA
Apr 2009	Executed PPA between GRU and GREC
May 2009	Gainesville City Commission approved the signed PPA
June 2010	Received Site Plan approval from Gainesville Development Review Board and received Need Determination from Florida PSC

<sup>&</sup>lt;sup>143</sup> GRU did not see GREC's proposed PPA until after the project was selected. It is a standard practice in evaluating RFP responses to carefully review a bidder's proposed PPA before making selection.



July 2010	Received Project Analysis Report from FDEP with recommendation for Site Certification approval
July 2010	Received draft air construction permit from FDEP
Aug 2010	Conducted Site Certification hearing
Sept 2010	Conducted air construction permit final hearing
Dec 2010	Received Site Certification from Siting Board after unanimous decision including from the Governor of Florida
Jun 2011	Financial closing and construction commencement
Oct 2013	Substantial completion of facility
Nov 2013	Performance testing
Dec 2013	Start of commercial operations

#### B. Scope of Work and Objectives

NAVIGANT

Pursuant to the Scope of Services outlined in the City's RFP and Navigant's retention letter dated October 16, 2014, Navigant evaluated the circumstances, relevant transactions, and decision-making processes surrounding GRU's efforts in the selection, negotiation and execution of the PPA including the respective changes in the proposed and final terms of the PPA. Navigant's efforts focused on GRU's adherence to guidance provided by the City Commission during the negotiation process, GRU's (as well as GREC's) representations regarding the key terms of the PPA, and the overall communication process between GRU and the City Commission.

#### C. Summary Findings and Observations

As discussed below, the City Commission authorized GRU to proceed with PPA negotiations with GREC on the basis of: i) a proposed 20-year term, ii) specified pricing, and iii) a certain risk profile consistent with the terms of GRU's RFP, and as set forth in GREC's binding proposal. However, the ultimate PPA executed by GRU and GREC was substantially different from the arrangement originally envisioned by the City Commission. As a result, the PPA has been a contributing factor to higher GRU electric rates, and continues to be a focus of concerns expressed by citizens, as well as elected officials of the City. Based on our review and evaluation of the information outlined above, we have observed the following:

- <u>Large Purchase Power Agreements (PPAs) are Complex</u> While not uncommon, large PPAs are complex long-term contracts involving a multitude of factors and assumptions that require significant expertise and experience to negotiate. Given the average length of PPAs and their dependence on various factors and assumptions, the relative cost/benefit of a PPA may change from year-to-year, and must be evaluated over the term of the contract.
- <u>GRU should have Terminated Negotiations when the Pricing Significantly Changed</u> –
   GREC significantly increased the proposed pricing/costs under the PPA several months

after selection of GREC's "binding proposal." It is not uncommon for buyers to terminate negotiations and proceed to the next highest ranked proposer when changes of the magnitude requested by GREC are proposed. If agreement cannot be reached with successive bidders, then it is also common practice to rebid or abandon the project.

- GRU Accepted Significant Risks in the Contract with Few Concessions While efforts to evaluate the contract terms before and during negotiations focused on many of the applicable key risks, GRU appears to have accepted the removal or modification of those terms with little apparent benefit to GRU and its customers under the contract. GRU assumed significant risk and limited its ability to mitigate future risks under the PPA by agreeing to: i) purchase the full 100 MW of power under the PPA, ii) extend the term from 20 to 30 years, iii) substantially increase the pricing (including an adjustment to protect GREC from construction cost increases), iv) removal of the Termination for Convenience clause, and v) modify the Right of First Refusal to a Right of First Offer.
- Other Terms in the PPA are Unbalanced in Favor of GREC In addition to the various risks assumed by GRU in the PPA, various other terms in the PPA are unbalanced in GREC's favor including language in the PPA in relation to the Change in Law, Performance Security, and the Unavailability Factor for Liquidated Damages provisions. Various other risks also transferred from GREC to GRU in the negotiation process including the construction cost risk and the property tax responsibility. Many of these provisions should have been assessed as part of a broader negotiating strategy and with reference to a preferred form of PPA had GRU employed one in its RFP. While negotiations are always a "give and take" process, the resultant PPA appears to have been mainly "give" and questions the experience and expertise of the GRU negotiating team in this process.
- GRU Failed to Adequately Evaluate, Address and Communicate Key Risks in the PPA GRU recognized many of the key risks associated with the GREC PPA, but did not adequately evaluate and address, continue to monitor, or communicate the key risks to the City Commission. GRU clearly understood the importance of re-marketing and selling the 50 MW (or greater) of excess power under the PPA, but was slow to start the process of evaluating the market for such power, and did not routinely communicate the status of, or difficulties associated with, those efforts. Likewise, GRU did not continue to adequately evaluate the ongoing risks (e.g., potential regulatory changes, trends in fossil fuel prices, construction costs, input prices, etc.) or report on those to the City Commission.
- Ongoing Analysis and Debate Regarding the PPA Costs and Key Risks was Limited We noted a surprising lack of ongoing assessment and debate among GRU and the City Commission with regard to the significant risks continuing to face the PPA. While concerned citizens and others continued to raise questions and concerns regarding the PPA, we did not observe the ongoing analysis of the key risks and changing market dynamics that we would have expected. Throughout the permitting process we noted more of "circle the wagons" mentality in defense of ongoing questions and concerns, rather than a continued evaluation of the basis for the PPA, and the underlying assumptions used in support of that decision.
- NÁVIGANT
  - <u>GRU Appears to be Overpaying for Fuel under the PPA</u> Pursuant to the PPA, GREC is responsible for purchasing the fuel required to operate the plant. GRU advises that the heat rate incorporated in the Base Fuel Charge in the PPA is 13,500 Btu/kWh. In evaluating their binding proposal, the GRU Selection Committee awarded GREC a score of 5 (out of 5) for a heat rate of 12,500 Btu/kWh. As such if 12,500 Btu/kWh is representative of the actual heat rate of the plant, then GREC is profiting on the fuel purchase equivalent to the cost of fuel associated with 1,000 Btu/kWh, which, based on recent pricing, roughly translates to GRU paying for excess fuel costs of more than \$50 million over the 30-year PPA term.
  - GRU was Pursuing Biomass and Negotiating a PPA as Directed by the City Commission In hindsight, the negotiation of the PPA and the subsequent permitting and Equitable Adjustment appear to have been guided more by accomplishing a perceived mandate by the City Commission, rather than an objective analysis and assessment of GRU's needs, costs and risks. While the process followed was generally sound, and many of the key risks known from the outset, the decision-making appears to have been more influenced by the drive for a biomass-fueled renewable energy source, and a reduction in the City's carbon footprint, rather than sound business and risk analysis, and concerns about electric rates.
  - Inconsistent Leadership and Decision-Making Likely Impacted the Process GRU (and the City's) evaluation of their long-term energy supply needs, the negotiation of the PPA, and subsequent permitting through the successful launch of the GREC facility, spanned eleven (11) years, four (4) GRU General Managers, four (4) Mayors, and over twenty (20) different City Commissioners. While the breadth of individuals involved in this process speaks to the amount of input provided by GRU, the City and others over the years, it also raises concerns regarding lack of continuity around the evaluation, assessment and analysis, as well as the ultimate implementation of the decisions surrounding the PPA.
  - <u>GRU has made Notable Efforts to Enhance Operations and Relief to GRU's Ratepayers</u> GRU continues to evaluate ways to enhance its operations with regard to its commitments under the PPA, and to seek opportunities for financial relief to its ratepayers. Navigant has reviewed and discussed many of these efforts and find them reasonable and prudent, as well as noted that certain past efforts should be revisited

It should be noted that although in hindsight, the shortcomings are apparent, a great deal of effort was invested by key personnel at GRU and the City with regard to the GREC project through its many challenges and regulatory hurdles. In addition, it is important to point out that despite the increased limitations and risk in the contract, as well as the significant cost increase associated with the Equitable Adjustment, many consider the GREC biomass-fueled electric generation facility to be a significant success. Construction was completed and operations initiated on schedule, and the facility is providing a diversified renewable energy supply as intended.

### D. Evaluation, Analysis and Observations

On April 29, 2009, GRU and GREC executed the PPA. As previously indicated, the GREC binding proposal was selected in response to an RFP issued and managed by the GRU Purchasing

Department. In particular, the GRU Purchasing Department oversaw vendor communications, the evaluation process and was involved in the procurement process until the City Commission approved the award of the contract.

1. Large-Power Purchase Agreements (PPAs) are Complex

There are many reasons why electrical generation projects face questions or concerns, as well as opposition, including challenges to the proposed need and ultimate costs. The development of large-scale generation projects is complex and contains significant risks. In many ways, the GREC biomass facility and associated PPA were no different from many other large-scale generation development projects in the multiplicity of risks and challenges that GRU and GREC faced.

a) PPA's are Fairly Common

A PPA is a binding agreement between two parties, one who generates electricity (Seller) and one who purchases the electricity (Buyer). PPAs typically apply at the wholesale level, (i.e., the Buyer is most likely a utility that will resell the energy purchased under the PPA to its retail customers). Products sold under the PPA typically include capacity, energy and ancillary services. For the most part, PPA terms range between 10 and 20 years.

Virtually all utilities have been involved with PPAs in some form as a Buyer or Seller or sometimes in both roles. PPAs between utilities have been around for many decades. More recently, with the deregulation of the generation function in many states and the proliferation of independent power producers such as GREC, the volume of PPAs has multiplied.

There are several types of PPAs. In some PPAs, the Seller is providing system power from a portfolio of units that it operates and the Buyer can generally rely on the Seller's portfolio in the event that one or more units is experiencing an outage. Other types of PPAs involve unit power in which the Buyer is purchasing all or a portion of the output of a designated generating facility. Unit power arrangements can involve purchases from existing facilities or, as in the case of GREC, the Buyer causes the facility to be constructed by issuing an RFP and then signing a long-term PPA under which the Seller agrees to construct the facility and the Buyer agrees to purchase the output. Since the PPA is the basis on which the Seller finances the construction of the facility, the PPA is typically a relatively long term with 20 years being the most common.

Under certain PPAs such as this one, the Seller secures the fuel and charges the cost to the Buyer under the PPA. A more typical PPA involves a tolling agreement under which the Buyer secures the fuel and the Seller essentially converts the fuel provided by the Buyer into electrical energy that is returned to the Buyer at a specified Delivery Point. Tolling agreements are most common when the Buyer is purchasing the full output of a specific facility (i.e., not portfolio-based PPAs).

b) Large Generation Projects Face Significant Risks and Challenges

Large power-plant construction projects have significant risks and cost escalations are common. Buyers such as GRU typically enter into PPAs to mitigate risks. With a new generating plant, there are many risks to be considered – permitting, construction, financing, change in law, property taxes

VI. Assessment of the PPA with GREC

and operating risks, among others. Generation developers are experienced in mitigating these risks and, as such, the Buyer typically expects the Seller to assume all or most of these risks. Buyers recognize that because the generation developer is assuming these risks, the PPA approach is usually the most expensive approach to causing a generating plant to be constructed.

Some of the key risks and challenges faced on large complex generation projects and PPAs are listed in the adjacent table.

A	
Permitting Risk	<ul> <li>Construction costs higher than initial estimate</li> <li>Construction delays</li> <li>Construction performance issues</li> </ul>
Construction Risk	<ul> <li>Seller must meet application target dates</li> <li>Application and approval delays</li> <li>Governmental authority delay in permit issuance</li> </ul>
Financing Risk	<ul> <li>Closing construction financing by specified date</li> <li>Higher financing costs than reflected in PPA rates</li> <li>Changes in financial markets that impede financing</li> </ul>
Fuel Risk	Price     Availability     Transportation
Operation Risk	<ul> <li>Maintaining required availability</li> <li>Meeting minimum contract capacity requirements</li> <li>Outages / Generation-schedule imbalances</li> </ul>
Heat Rate Risk	<ul> <li>Failure to meet heat rate guarantee</li> <li>Additional fuel costs</li> <li>Heat rate degradation</li> </ul>
Change in Law	<ul> <li>Changes in law necessitate changes in project</li> <li>Allocation of change in law risks</li> <li>Prorating change in law costs that occur in PPA</li> </ul>
Default Risk	<ul> <li>Failure to comply with material PPA term</li> <li>Failure to pay amounts due by specified dates</li> <li>Failure to meet minimum availability or capacity</li> </ul>
Ad Valorem Tax	<ul> <li>Incorrect estimate of property tax increases</li> <li>Impact on delivered cost of energy</li> </ul>

Other approaches available to utilities such as GRU include:

- Build-Own-Transfer an arrangement under which the utility and the developer execute an
  agreement whereby the developer would assume all risks through commercial operation,
  and then transfer the facility and risks to the utility; and
- Engineering Procurement Construction (EPC) a contract under which the EPC contractor would oversee the construction of the facility while completed portions would transfer to the utility as progress payments are made (i.e., the utility assumes substantially more risks under this arrangement than a Build-Own-Transfer arrangement).
  - 2. Pricing in the PPA Changed Significantly from GREC's Binding Proposal

The primary pricing components included in the PPA are: (i) Non-Fuel Energy Charge, (ii) Fixed O&M Charge, (iii) Variable O&M Charge and (iv) Fuel Charge. However, certain core elements of the pricing were not provided, addressed or negotiated until late in the negotiations and changed significantly from the initial pricing proposed in GREC's binding proposal. It should be noted that under the Non-Fuel Energy Charge GREC recovers a return of, and on, the capital invested in the project. The following table sets forth the PPA prices as applicable for the monthly billing periods.

		PPA Prices	
Billing Charge	Measurement	PPA Price	Escalation
Non-Fuel Energy	Available Energy <sup>144</sup>	\$50.00145/mWh x Construction Cost Adjuster	None
Fixed O&M	Available Energy	\$23.00/mWh	None
Variable O&M	Delivered Energy <sup>146</sup>	\$3.15/mWh	CPI
Fuel Charge	Delivered Energy	Base Fuel Charge + Fuel Price Adjuster	None

GREC's binding proposal included a 20-year term and a fixed monthly capacity charge for the term (\$39.00/kW-mo. with no construction cost adjusters, which is equivalent to \$59.36/mWh at 90 % capacity factor, plus a monthly fuel charge). GREC's binding proposal also included an Energy Price of \$38MWh +/- Fuel Adjuster.<sup>147</sup>

With the fixed monthly capacity charge, GREC's proposed PPA was a Take-or-Pay arrangement, notwithstanding that the RFP included a preference for a Take-and-Pay structure. Under the Take-and-Pay approach, GRU would be only be responsible for payment for the energy actually delivered from the project as compared to a Take-or-Pay arrangement under which GRU would be responsible for capacity payments even if the project was not available for generation. According to GREC's proposal, lenders prefer the Take-or-Pay structure because it aligns dispatch incentives between the project and its off-takers of power.

It is noteworthy that Draft No. 1 (of 8) extended the term from 20 to 25 years and converted the PPA from a Take-or-Pay to a Take-and-Pay arrangement. Draft No. 1 also substantially revised the rate structure to include:

- Capital Charge of \$42.92/mWh x Construction Cost Adder escalated at 3% annually and applied to Available Energy;
- Fixed O&M Charge of \$20.22/mWh escalated at the change in CPI and applied to Available Energy;
- Variable O&M Charge of \$3.15/mWh escalated at the rate of change in the CPI and applied to Delivered Energy; and
- Fuel Charge applied to Delivered Energy.

<sup>&</sup>lt;sup>144</sup> Available Energy is defined for each hour as the energy generated by the Project and delivered to the Delivery Point plus, to the extent that GRU dispatches the Project at less than 100%, each mWh that could have been generated by the project but was not generated due to dispatch instructions by GRU, plus, for each hour that the Project could have been capable of producing and delivering Energy, but was prevented from doing so due to a constraint on GRU facilities, each mWh that could have been generated had the Project been dispatched at 100%, but was not generated due to the constraint.

<sup>&</sup>lt;sup>145</sup> This amount was ultimately increased to \$54.40/mWh in connection with the Equitable Adjustment for Change of Law Agreement. With the application of the Construction Cost Adjuster (1.0321), the final Non-Fuel Energy Charge is \$56.15/mWh.

<sup>&</sup>lt;sup>146</sup> Delivered Energy means the sum of each mWh generated by the Project and delivered to the Delivery Point during the billing period.

<sup>&</sup>lt;sup>147</sup> Fuel Adjuster: +\$1.15/MWh for every \$1.00/ton that the average delivered fuel exceeds the expected delivered fuel price of \$28.00/ton for the previous quarter; -\$1.15/ton for every \$1.00/ton that the average delivered fuel price falls below the expected delivered fuel price of \$28.00/ton for the previous quarter.

The revised pricing in the first draft of the PPA was substantially higher than the pricing included in GREC's binding proposal and would have been applicable for a five-year longer term. The pricing reflected in Draft No. 1 also remained unchanged through Draft No. 5 and thereafter, the pricing was blank in Draft Nos. 6 through 8. The final fixed pricing was not available in the draft PPAs until the final version of the PPA.

In summary, with respect to non-fuel pricing (i) GREC proposed fixed pricing in its RFP bid; (ii) the parties discussed higher pricing subject to escalation during the course of the negotiations; and (iii) the parties settled on substantially higher fixed pricing in the final PPA. In addition, the 20-year term in GREC's binding proposal was initially increased to 25 years and further increased to 30 years in the final executed PPA. As such, and based on the foregoing, total nominal non-fuel payments to GREC increased from \$936 million pursuant to the binding proposal to more than \$1.9 billion pursuant to the pricing incorporated in the PPA. A summary of the significant changes in pricing is provided in the following table, and further discussed below:

Charge	Binding	Drafts 1	Final PPA	Equitable	Actual
	Proposal	through 5		Adjustment	Invoice
	(Dec – 2007)	(June to Nov –	(Apr – 2009)	(Mar – 2011)	(Dec – 2014)
		2008)	-		
Capacity	\$39/kW-mo.				
Energy	\$38/MWh +/-				
	Fuel Adjuster				
Non-Fuel		\$42.92/MWh <sup>148</sup>	\$50.00/MWh x	\$54.40/MWh x	\$56.15/MWh
Energy		x Construction	Construction	Construction	
		Cost Adjuster	Cost Adjuster	Cost Adjuster	
FOM		\$20.22/MWH149	\$23.00/MWh	\$23.00/MWh	\$23.00/MWh
VOM <sup>150</sup>		\$3.15/MWh	\$3.15/MWh	\$3.15/MWh	\$3.48/MWh
Fuel		Base Fuel	Base Fuel	Base Fuel	\$36.27/MWh
		Charge +/- Fuel	Charge +/- Fuel	Charge+/- Fuel	
		Price Adjuster	Price Adjuster	Price Adjuster	
Shutdown <sup>151</sup>		Startup Fuel	Startup Fuel	Startup Fuel	
		Cost + Startup	Cost + Startup	Cost + Startup	
		O&M Cost	O&M Cost	O&M Cost	
Ad Valorem		Actual taxes	Actual taxes	Actual taxes	
		paid	paid	paid	
Term	20 yrs.	25 yrs.	30 yrs.	30 yrs.	30 yrs.

Unless otherwise indicated, the prices set forth in the table above are fixed for the term of the applicable PPA version.

The table below shows the monthly billings and delivered energy volumes for 2014. The overall realized rate was \$157/MWh measured at the Delivery Point.<sup>152</sup>

<sup>&</sup>lt;sup>148</sup> Subject to annual escalation on the anniversary of the Commercial Operation Date of 3%.

<sup>&</sup>lt;sup>149</sup> Subject to annual escalation on the anniversary of the Commercial Operation Date based on CPI change.

<sup>150</sup> Ibid

<sup>151</sup> Ibid

<sup>&</sup>lt;sup>152</sup> Gainesville Renewable Energy Center, LLC Invoices presented to GRU since the start of operation

GREC Energy Sales and Charges for 2014				
Month	Delivered Energy (MWH)	Invoice (\$)	Cost per MWH (\$)	
January	56,212	7,911,484	140.74	
February	50,064	7,292,956	145.67	
March	46,731	6,699,801	143.37	
April	47,978	7,295,715	152.06	
May	30,040	4,263,257153	141.91	
June	40,339	6,076,451	150.63	
July	53,606	7,524,640	140.37	
August	57,361	8,242,178	143.69	
September	51,893	7,213,522154	139.01	
October	27,150	$11,766,087^{155}$	433.37/146.98	
November	60,002	8,239,073	137.31	
December	56,837	8,314,481	146.29	
TOTALS	578,213	90,839,645	157.10	

As described above, the Fuel price for the billing period is equal to the Base Fuel Charge plus the Fuel price Adjuster. The Base Fuel Charge is the Target Fuel Price multiplied by 1.35 tons/mWh for each calendar year. The Target Fuel Price is the average delivered price per ton for the prior calendar year. The Fuel Price Adjuster is defined by the formula: (Actual Fuel Price – Target Fuel Price) x 1.15 tons/mWh. The Actual Fuel Price is the delivered price per ton for the billing period (net of tipping fees).

3. GRU should have Terminated Negotiations when GREC Increased Pricing

GRU should have terminated negotiations with GREC when GREC increased the proposed pricing several months after selection of GREC's "binding proposal." GREC's binding proposal was submitted in April 2008 and selected by the City Commission in May 2008. It included a Take-or-Pay arrangement with a fixed Monthly Capacity Charge (\$39/kW-month) for the 20-year PPA term (i.e., no escalation applied to this price for the term of the PPA). GREC's binding proposal also included an Energy Price (\$38/MWh +/- Fuel Adjuster).<sup>156</sup>

After selection however, GREC submitted its initial draft PPA on June 20, 2008, which did not include pricing. The first formal draft (Draft No. 1 of 8) of the PPA, was not received from GREC until September 26, 2008, and substantially revised the initial draft PPA and significant increased the proposed pricing from that provided in the binding proposal. A comparison of the pricing in the April 11, 2008 Binding Proposal with the pricing in Draft No. 1 is set forth in table below:

NAVIGANT

<sup>&</sup>lt;sup>153</sup> Net of LDs in the amount of \$282,303 for Unavailability Factor of 14.25%.

<sup>&</sup>lt;sup>154</sup> Net of LDs in the amount of \$540,401 for Unavailability Factor of 8.35%.

<sup>&</sup>lt;sup>155</sup> Includes Ad Valorem Taxes of \$7,775,562.

<sup>&</sup>lt;sup>156</sup> The Fuel Adjuster was: (i) + \$1.15/MWh for every \$1.00/ton that the average delivered fuel price exceeds the expected delivered fuel price of \$28.00/ton for the previous quarter, and (ii) - \$1.15/MWh for every \$1.00/ton that the average delivered fuel price falls below the expected delivered fuel price of \$28.00/ton for the previous quarter.

	PPA Prices (Bir	nding Proposal vs. Draft No. 1)
Billing Charge	<b>Binding Proposal</b>	PPA Draft No. 1 (9/26/08)
Capacity Charge	\$39/kW-month	
Energy Price	\$38/MWh +/- Fuel	
	Adjuster	
Capital Charge		\$42.92/MWh x Construction Cost Adjuster; subject to
		3% annual escalation with the first increase to be
		applied on 1/1/10
Fixed O&M		\$20.22/MWh subject to annual escalation based on
Charge		change in CPI from the preceding 12 months with the
		first change to be applied 1/1/10
Variable O&M		\$3.15/MWh subject to annual escalation based on
Charge		Change in CPI from the preceding 12 months with the
		first change to be applied 1/1/10
Fuel Charge		Base Fuel Charge +/- Fuel Price Adjuster
Shutdown		Startup Fuel Cost + Startup O&M Cost escalated at
Charge		change in CPI from the preceding 12 months with the
		first change to be applied 1/1/10 for the Startup O&M
		Cost only
PTC Adder		If PTCs are available, the PTC Adder shall be
		\$0/MWh; if PTCs are not available, the PTC Adder
		shall equal \$10/MWh
Ad Valorem		Actual monthly ad valorem taxes paid by Seller

In addition to the pricing changes described above, Draft No. 1 changed the 20-year PPA term to 25 years and added adjustments for escalation and changes in construction costs. As described, the proposed contract prices outlined in the table above are substantially higher than what was in GREC's binding proposal. In addition, the Escalation components and Construction Cost Adjuster added significant risks to GRU that were not present in the binding proposal.

Under general governmental procurements, if an acceptable contract cannot be negotiated with a selected bidder, the buyer terminates negotiations and moves on to the next bidder. This also was the specific instruction to GRU from the City Commission. And, if an agreement cannot be reached with successive bidders, the buyer typically terminates the RFP and rebids or abandons the project. When asked why GRU continued to negotiate with GREC after the major changes were proposed, a GRU representative responded that it was believed that the negotiations with Covanta and Sterling Planet would have been no better.

- 4. GRU Assumed Significant Risks under the PPA
  - a) GRU's Decision to Purchase all 100 MW Added Substantial Risk

GRU and GREC are parties to a PPA under which all products from the 100 MW Biomass-Fired Power Production Facility ("Project") are to be sold by GREC to GRU for a 30-year term. The Project commenced commercial operation in December of 2013.

Pursuant to the PPA, GREC is required to make 100 percent of the following products available to GRU: Dependable Capacity, Energy and Environmental Attributes, all of which are defined terms in the PPA. However, GRU's decision whether to take 50% or 100% of the biomass facility output does not appear to have been analyzed in-depth. Given the ramifications of the agreed purchase of up to 50 MW, if not more, of higher-cost electric power generation than needed by GRU should have necessitated greater discussion, analysis and risk assessment. The obvious increased risks associated with GRU's purchase guarantee seem to have been understood but were largely downplayed at the time the decision was being made.

b) Extending the Term from 20 to 30 Years Added Risk

GREC's binding proposal and initial draft PPA included a 20-year term. However, the 20-year term was extended to a 30-year term in the executed PPA. While valid reasons for extending a contract term can involve efforts to spread capital costs over a longer period with a corresponding impact to lower rates, the rates in the final PPA after extension of the term to 30 years were still substantially higher than the rates proposed in the binding proposal.

c) GRU's Right of First Refusal was Replaced with a Right of First Offer

GRU initially sought a Right of First Refusal (ROFR) under the PPA, which would have given the City the right to purchase the facility upon GREC's receipt of an acceptable offer from a third-party (i.e., the first right to acquire the facility at an acceptable price to GREC). However, through negotiations, GRU relinquished on the ROFR and, in turn, accepted a Right of First Offer (ROFO) concept proposed by GREC. The ROFO provides that prior to selling the project, GREC must give notice to GRU of its intent to sell the facility, and GRU can make an offer to purchase the facility. If the parties cannot reach agreement within a specified period, GREC shall have 360 days to close on a sale to a third party for a price and for terms that are no less than the price and no more onerous than the terms in GRU's initial price offer. If GREC cannot close on a sale within such 360-day period, it must make another offer to GRU before selling the facility.

However, in reality the ROFO (i.e., the right to make an offer if GREC is interested in selling the facility) provided no real benefit to the City assuming that the City would always have that right, as well as any other prospective acquirer, to make an offer when the facility was being put up for sale.

d) Construction Cost Risk Shifted from GREC to GRU

When utilities issue RFPs for new generation, they expect the selected developer to assume the construction cost risk. This is one of the primary reasons for utilities issuing an RFP for new generation rather than building the project themselves. Developers bidding into such RFPs include a premium to their pricing as insurance in the event that the actual cost of constructing the proposed project is higher than the cost on which the developer's bid was based. GREC is an experienced generation developer and its binding proposal included 20 year fixed pricing with no adjustment for construction cost changes. Presumably, GREC factored the construction cost risk into the pricing incorporated in its binding proposal.

However, in the pricing proposed by GREC several months after it submitted its binding proposal, GREC included a Construction Cost Adjuster, which was defined as "the percentage of the Aggregate Construction Indexes on Construction Commencement date divided by the Aggregate Construction Indexes for September 2008."<sup>157</sup> By including a Construction Cost Adjuster, which was maintained through all eight drafts as well as the executed PPA, GREC essentially shifted the construction cost risk to GRU.

In normal PPA negotiations this would be an unacceptable action, and which typically may have caused the utility to terminate negotiations and proceed to the next highest ranked bidder. It is unclear why GRU accepted this significant change with little apparent resistance. The application of the Construction Cost Adjuster resulted in an increase of \$1.75/MWh to the Base Non-Fuel Energy Charge. Over the 30-year PPA term, this resulted in more than \$41 million (nominal) in additional charges to GRU under the PPA.

e) Property Tax Responsibility Shifted from GREC to GRU

According to GREC's binding proposal, it estimated "that the Project could provide approximately \$6.7 million in total annual property tax revenue to the area, of which approximately \$1.2 million would flow to the City of Gainesville and \$2.5 million would flow to the school board." As the rates proposed in GREC's binding proposal did not include a pass-through provision for property taxes (as is often the case in PPAs), a reasonable interpretation of the proposal would be that GREC was assuming the risk for property taxes and had incorporated such risk in its proposed pricing.<sup>158</sup>

However, the first formal draft of the PPA (Draft No. 1) received in September 2008 included a pass-through of such costs, which was ultimately incorporated in the executed PPA. Meeting notes from a September 5, 2008 negotiating session included the action: "Nacogdoches to remove \$2 million from capacity charges and treat ad valorem property taxes as a pass-through." If GREC's intent was to treat property taxes as a pass-through, it should have so indicated in its binding proposal. It is unclear why GRU agreed to take on this risk and cost with little apparent concession.

5. GRU should have received Concessions for the Termination for Convenience

GRU's inability to structure a termination for convenience or "Back-out" clause was unreasonable in light of the circumstances and changing market dynamics influencing both the need and justification for pursuing the 100 MW biomass-fueled facility. In hindsight, GRU should have received a concession from GREC when GRU agreed to eliminate the Termination for Convenience.

The City Commission's authorization for GRU to proceed with PPA negotiations with GREC was conditioned on the PPA including a Termination for Convenience type clause. While such a clause

<sup>&</sup>lt;sup>157</sup> The Construction Cost Adjuster is defined in the executed PPA as the sum of (a) ninety-three percent (93%) multiplied by the quotient of (i) the ENR BCI ATL most recently published as of the Construction Commencement Date, divided by (ii) the ENR BCI ATL for April 2009, plus (b) seven percent (7%) multiplied by the quotient of (i) the Dollar/Euro Exchange rate for the Construction Commencement Date, divided by (ii) the Dollar/Euro Exchange rate for the Effective Date.

<sup>&</sup>lt;sup>158</sup> In GRU's May 10, 2007 presentation to the Commission, it referenced on Slide 12 "PPA: Purchased Power Agreement (no capital required), Owner has ad valorem tax liability". (emphasis added)

was not included in the initial PPA draft submitted by GREC, it was included in various subsequent drafts and was the subject of substantial negotiation by the parties. In addition to making GREC whole for its costs incurred up to a termination point, the provision drafted by GREC required GRU to make GREC whole for its estimated opportunity cost, referred to in the PPA drafts as the "Development Fee." The structure of the Development Fee changed in the various PPA drafts and ranged from \$10 million to \$32 million, as well as included variations of a fee based completed calendar quarters (e.g., plus \$5 million for each complete calendar quarter beginning on January 1, 2009, not to exceed a total Development Fee of \$30 million).

GREC significantly opposed the inclusion of such a clause and provided a detailed memo describing why the provision "causes us difficulties as we move through the development process and seek project financing for the facility as well as negotiate contracts for the supply of major equipment for the facility, contracts for the construction of the Facility and fuel contracts." Ultimately, GRU agreed to delete the provision. GRU rationalized its removal claiming that the cost of exercising the provision was so expensive that GRU would never exercise it. However, GRU missed the point.

Since GREC made it clear that eliminating the provision was of value to GREC, GRU should have negotiated the elimination for some other concession (i.e., value) in in the PPA. This is fundamental to contract negotiations. However, based on a review of the PPA meeting notes and the PPA drafts, it appears that GRU granted GREC this accommodation and received little in return. Moreover, since the City Commission approval to proceed with negotiations was conditioned on including such a provision, it does not appear that the City Commission formally agreed to its deletion.

6. The PPA is Unbalanced in Favor of GREC

There are various other provisions in the PPA we observed that are unbalanced in favor of GREC. While an experienced PPA negotiator would have attempted to resist GREC's position with respect to these matters, there is little evidence from the review of PPA drafts and the negotiation notes that GRU took issue with these matters. The subjects that raised particular concern in our review included the: (i) Change in Law; (ii) Performance Security; and (iii) Limitation on Liquidated Damages provisions. Following is a discussion on these matters:

a) Change in Law

The PPA defines a Change in Law as:

"a change in any applicable law, regulation, permit, ordinance, market rule, or order of any governmental or regulating authority, market regulator, court or arbitration tribunal enacted after the Effective Date where such change in law specifically increases or decreases the actual cost of generating and selling the Products, but it shall not include any such change in law that is not specifically directed toward generating facilities or which just has general economic effects that indirectly increase or decrease Seller's costs, nor shall it include any change in law with respect to Production Tax Credits, Renewable Energy Grant or Investment Tax Credit."

As a Change in Law has the potential to substantially increase (or decrease) costs under a PPA for a long term, it is often one of the most heavily negotiated issues in a PPA. However, as indicated by the foregoing quote, GRU assumed the full risk for costs associated with a Change in Law. This is not typical.

A common approach to this issue is for the PPA to specify that in the event of a Change in Law, the parties will meet to confer and attempt to balance the benefit of the bargain. Another approach is for the PPA to specify individual amounts referred to as "Buyer's CIL Costs" and "Seller's CIL Costs," which establishes a specific Change in Law cost responsibility for each party.

In addition, a serious concern associated with this provision entails the prospect of a Change in Law occurring late in a PPA term. Many PPAs include provisions whereby the Change in Law costs are allocated based on the remaining term of the PPA as compared to the remaining life of the project. For example, if a PPA had five years of the term remaining when the Change in Law cost was incurred and the project was estimated to have a remaining service life of 15 years, the Buyer would be responsible for 1/3 (5 years ÷ 15 years) of the Change in Law costs. However, under the executed PPA, GRU is responsible for 100% of the Change in Law costs.

#### b) Performance Security

With respect to meeting its obligations under the PPA, GREC was required to post \$5 million in Performance Security. This is an exceptionally low amount of Seller Security, particularly since GREC is also responsible for securing fuel for the project. In the event that things do not go well, GREC can walk away with relatively negligible obligations to GRU. On the other hand, the PPA requires GRU to post \$40 million of Buyer Security. While this requirement is waived as long as GRU's senior unsecured debt rating is at or above a Standard & Poor's rating of "A-" or a Moody's rating of A3, we raise the question as to why GRU has a Buyer's Security requirement at all.

In PPAs where a generation developer is selling power and energy to a regulated utility, the utility is typically required to post Buyer Security. This security is intended to protect the Seller from regulatory risk (i.e., if the state Public Service Commission does not approve cost recovery of the generation project in the utility's retail rates). Such is not the case with GRU since it effectively has rate setting capability. To a generation developer, a PPA counter-party with rate-setting authority is the "gold standard." As such, were are surprised that GRU agreed to post Buyer Security.

c) Unavailability Factor Liquidated Damages

Pursuant to the PPA, the Unavailability Factor for the Summer Period (June through September) is 5% and for the Winter Period (October through May) is 12.5%. The Unavailability Factor is the sum of Planned Outage Hours, Maintenance Outage Hours and Equivalent Forced Outage Hours divided by the Period Hours. If at the end of any seasonal period, the facility's Unavailability Factor is greater than the requirement, GREC is subject to liquidated damages in the amount of \$150,000 (\$2009) for each 1% difference between the Unavailability Factor Requirement and the actual Unavailability Factor. While this is a reasonable provision, the concern entails a cap in the PPA in the amount of \$1.5 million in the aggregate for any two consecutive seasonal periods. In general, PPAs do not limit the Seller's exposure to liquidated damages for unavailability.

7. GRU may be Overpaying for Fuel under the PPA

Pursuant to PPA, GREC is responsible for purchasing the fuel required to operate the plant. In addition, measurement of the efficiency of a power plant is established through its heat rate for which the units are Btu/kWh. Most PPAs include heat rate guarantees under which the Seller is required to meet a specified target heat rate and is subject to penalties in the event that the actual heat rate is higher than the guaranteed heat rate. However, while a heat rate guarantee is not referenced in the PPA, GRU advises that the heat rate incorporated in the Base Fuel Charge in the PPA is 13,500 Btu/kWh.

In evaluating the GREC binding proposal, the GRU Selection Committee focused on GREC's proposed heat rate, which was 12,500 Btu/kWh (i.e., awarded them a higher score/ranking because of this). However, if 12,500 Btu/kWh is representative of the actual heat rate of the plant versus the 13,500 Btu/kWh, GREC may be profiting on the fuel purchase, roughly by the cost of fuel associated with 1,000 Btu/kWh. GRU reports that GREC uses a net heating value of 5,000 Btu/lb. of fuel. As such, this would translate into GRU paying for 5,621 excess tons of fuel per year. Using the January 2014 invoice price (\$25.09/ton) as a proxy, the monthly additional charges could be \$141,035, or extending to 30 years, \$50.8 million (nominal).

Admittedly, the foregoing is a rough analysis that assumes that the actual GREC heat rate is the level attributed to its binding proposal and that such heat rate is maintained for 30 years (i.e., heat rates are subject to degradation over a facility's service life). However, such an analysis indicates that a more detailed study, including a projection of fuel costs over the 30-year term, may be warranted to determine if GRU may be overpaying for fuel.

8. GRU Did Not Keep the City Commission Advised as to the Negotiations

It should be noted that during the course of the PPA negotiations, the GRU negotiating team did not keep the City Commission informed as to the specific details of the status of the negotiations (e.g., increased pricing, extended term) other than to provide very general statements that negotiations were proceeding well.

#### E. Recommendations as to the Power Purchase Agreement

Provided below are a series of recommendations that GRU should consider related to the PPA and GRU's power supply options:

1. Reconsider a Prepayment Arrangement

In the May 7, 2009 GRU presentation to the City Commission recommending approval of the PPA, GRU indicated that a Prepayment Restructure of the PPA would mitigate the monthly retail rate impacts on consumers' bills associated with the GREC project. Specifically, it was projected that the 2014 and 2019 monthly bills for a residential customer using 1,000 kWh would be reduced by \$2.22 and \$2.10, respectively. As such, at the time, GRU correctly recognized that a tax-exempt prepayment arrangement would reduce power purchase costs over the term of the PPA.

During 2011 and 2012, GRU received detailed presentations from investment banks including Goldman, Sachs & Co., Bank of America, Merrill Lynch and J.P. Morgan concerning the potential benefits of a prepayment arrangement. All presentations indicated that GRU would realize substantial savings by pursuing a prepayment arrangement. By financing a prepayment restructuring of the PPA with tax-exempt debt, GRU could potentially provide economic benefits for its ratepayers. It is not clear why GRU has not continued to aggressively pursue this option.

As noted above, all of the investment bankers that reviewed this option several years ago projected that GRU would realize substantial savings and that GREC would also benefit by realizing the lump sum payment and thus avoid having to access capital markets. With GRU's strong credit quality, a prepayment restructuring of the PPA continues to represent an opportunity to realize substantial economic benefits. As such, a refreshed analysis of this option is warranted.

As with most prepayment arrangements, a basic concern is the risk of the Seller going bankrupt or otherwise defaulting on the PPA. Any prepayment arrangement would need to be structured to mitigate that risk. In this situation, the arrangement could entail GRU paying GREC a lump sum in the form of a Guaranteed Annual Prepaid Contract Quantity. In addition to the one-time lump sum, GRU would pay GREC a substantially reduced Non-Fuel Energy Charge (e.g., that charge is currently \$56.15/mWh, assume for discussion that it is reduced by 50% to \$28.08/mWh) applied to the Guaranteed Annual Prepaid Contract Quantity. Any energy amounts in excess of the Guaranteed Annual prepaid Contract Quantity would be charged at the \$56.15/mWh rate. All other PPA charges, including the Fuel Charge, would continue to apply. Under this arrangement, GRU would issue tax-exempt debt to finance the lump sum payment presumably at a substantially lower interest rate than GREC's financing cost. Moreover, by GRU continuing to have an obligation to pay a Non-Fuel Energy Charge to GREC (albeit a substantially reduced charge), GREC would be incented to continue to own and operate the project.

Notwithstanding that GREC would continue to be incented to own and operate the project, the possibility of a GREC default would represent a risk to GRU. As such, the prepayment arrangement would need to be structured such that GRU would have a lien on the project. Typically in the event of a Seller default, the lender would step in and operate the project to ensure that PPA obligations are met. However, in the event that the lender fails to perform, GRU should have step-in rights under which it could foreclose on the project and operate the facility for its own account. In summary, while there is no assurance that restructuring the PPA to incorporate a prepayment arrangement would provide the necessary economic benefits and risk mitigation sufficient to cause the parties to proceed with such an undertaking, there is a prospect of significant benefits.

2. Convert PPA to a Tolling Agreement (GRU Purchases Fuel Handling Facilities)

Most PPAs involving the purchase of the full output of a generating unit are tolling agreements. Under a tolling agreement, the Buyer secures the fuel necessary for the plant's generation. The Seller essentially provides the conversion machine (i.e., the power plant) for converting one form of energy (the fuel) to another form of energy (electricity). Since it appears that the current fueling arrangement for the GREC plant may not be to GRU's benefit, converting the PPA to a tolling agreement warrants review. Under such an arrangement, GRU would be responsible for securing the fuel for the plant. Since such an arrangement is currently prohibited by the terms and conditions of the PPA, a renegotiation would be required.

Along with converting the PPA to a tolling agreement, in order to provide some incentive to GREC to participate, GRU may want to pursue purchasing the Fuel Handling System and assume responsibility for fuel handling operations. The overall plant arrangement is such that ownership demarcations for the Fuel Handling System could be readily established. GRU potential assumption of the ownership of the Fuel Handling System also would be consistent with the conversion of the PPA to a tolling agreement. Under this arrangement, GRU would have full responsibility for securing the fuel and transferring it to GREC at a specifically identified point of demarcation (e.g., the boiler metering bins). GREC's sole responsibility would be to convert the fuel to electric energy and return it to GRU at the Delivery Point identified in the PPA.

To purchase the Fuel Handling System from GREC, GRU could issue tax-exempt debt. In return for the lump sum payment from GRU, it would be expected that GREC would permanently reduce the Non-Fuel Energy Charge in the PPA. The Fuel Charge in the PPA would be eliminated and reductions to the Fixed O&M Charge and Variable O&M Charge may be warranted because GREC would no longer be maintaining the Fuel Handling System.

By acquiring and operating the Fuel Handling System, GRU would be assuming a portion of the operating risk that is currently allocated solely to GREC. Under the current arrangement, if there is a failure in the Fuel Handling System that causes the plant to be unable to generate, GRU would have no payment obligation to GREC. However, with GRU's ownership of the Fuel Handling System, in the event of a failure of that system that causes the facility to be unable to generate, GRU would still owe a payment to GREC for the energy that could have been generated but for the Fuel Handling System failure. Regardless, we believe consideration should be given to performing a detailed analysis of that potential exposure in conjunction with an economic analysis of converting the PPA to a tolling agreement and purchasing the Fuel Handling System.

3. Reduce Minimum Dispatch in PPA to 55MW

Section 10.6 of the PPA sets the minimum dispatch for the Project under non-emergency operating conditions at 70 MW. During a System Emergency, for a period not to exceed one hour, the project may be dispatched between 50 MW and 70 MW. However, we understand that operating a minimum dispatch of 55 MW would have significant benefits to GRU from an operational perspective. A combination of the GREC 70 MW minimum dispatch and the Deerhaven minimum loadings is apparently causing GRU to dump energy (i.e., sell at a loss) during nighttime hours. We believe an effort to evaluate a reduced minimum dispatch in return for some increased payment or other PPA concession, relative to GRU's current incremental costs, would be warranted.

4. Shift Payment Terms in the PPA

Another option that could be considered would be to attempt to negotiate for lower payment terms in the initial years and higher terms in the latter years of the contract. While this might be referred to as "kicking the can down the road," such action would not only relieve the rate pressures from the PPA, but also allow enough time to pass for the biomass resource costs to become more

favorable in relationship to the cost of natural gas, or for the regulatory environment (i.e., carbontax legislation, the EPA's Clean Power Plan, or a Florida RPS) to favor more renewable energy development.

5. Other Considerations for Improving GRU's Financial and Operational Condition

In addition to those described above, the following efforts should be continued and/or considered:

- Continue to Seek Third Parties to Take a Portion of the GREC Output One of the major problems with having the biomass PPA as a part of GRU's generation portfolio (besides the price) is the level of required take from GREC as base load energy, which currently equates to 70 MWs. This volume at its current cost adversely impacts the overall cost of power to GRU customers. GRU should continue to seek mid-term (up to five year) contracts to sell renewable power within the Florida power market. Any price above the marginal (fuel and variable) costs to produce a kilowatt can contribute to the fixed costs associated with the facility. There may be some interest to other municipalities of receiving renewable power at a fixed cost over a number of years, satisfying both the image need to be a supporter of renewable power, and providing some hedge against possible future market volatility.
- <u>Continue to Seek Third Parties to Take Available MWs from the Deerhaven Coal Unit</u>— Because of the requirement to take GREC output as base load, megawatts from the Deerhaven units are available for sale to third parties. Again, any costs received above the fuel and variable costs to operate the coal and gas units provides a contribution to the fixed costs of owning and operating those facilities. These types of contracts should probably not exceed five years.
- <u>Consider Pooling Generation Assets with other Municipality Generators within the State</u>— GRU could consider offering its generation assets as part of a pool through the Florida Municipal Power organization, although it is not clear what the value may be to the pool, and whether it would place GRU in any better position than it is in currently. Issues such as transmission constraints and the relative cost of GRU generation compared to the rest of the Pool, may have an adverse impact on the value received, but it should be evaluated.
- <u>Consider Exchanging Generation Assets and PPA Rights for a Long-Term PPA with a Larger Generator</u>—One consideration could be to sell GRU's generation assets, assign its rights under the GREC PPA, and in exchange negotiate a long-term power supply agreement with one of the larger regional power suppliers such as Progress Energy or NextEra/Florida Power & Light. The size of the GREC PPA output is miniscule compared to the portfolio of either of these companies, and the costs could be more easily absorbed into their current portfolio. The opportunity to serve the load of Gainesville and its region might provide enough appeal to such a third party that the overall costs of power could be lowered over the longer-term and provide some price stability for GRU's customers. This is not a recommendation that Navigant would ordinarily make to our public power clients because asset ownership creates value and provides price stability. However, the impact of the 30-year PPA is substantial and it is possible that there may be of sufficient interest in the

marketplace to serve the Gainesville load requirements and lower the overall costs to GRU customers over the long term.

 <u>Evaluate the current GRU Rate Structure and Consider offering a "Green Choice" Option</u>— Several municipal utilities have had success developing and promoting green choice options for its more socially conscious residential, commercial and industrial customers. By shifting the higher costs of biomass resources to customers in this class, rates relative to other rate classes could potentially be adjusted downward.

In evaluating all of these options, there are a number of factors that should be considered in determining the right path or sequencing of options that should be considered. Some of those factors include:

- The ease of implementation of the option;
- The willingness of GREC to renegotiate the PPA;
- The economic benefit of the option;

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- The public perception and acceptability of the option to the Gainesville community and the GRU customers;
- The level of changes in prices in the Florida wholesale power market; and
- The level of risk assumed by GRU in each option.

Other factors may exist that need to be taken into consideration, but each of the options should be evaluated and a roadmap developed to achieve savings for GRU and its customers.

### VII. Financial Impact of the PPA and Outlook for Biomass

#### A. Introduction

On April 29, 2009, GRU's then General Manager (Robert E. Hunzinger) executed the 30-year GREC PPA for "all of the energy production from" a 100 MW biomass-fired power production facility to be built, owned and maintained by GREC.<sup>159</sup> The PPA was later approved by the City Commission on May 9, 2009.<sup>160</sup> At the time, Mr. Hunzinger was quoted saying that the contract "would probably be the biggest commitment for GRU and the City since Deerhaven 2" (the City's coal-fired electric unit built in 1981.<sup>161</sup> It was further noted in the City Commission's May 9, 2009 meeting that:

"While the long term economics for the facility are favorable compared to conventional alternatives, the biomass plant may increase the fuel adjustment for the first few years of operation, depending on the outcome of climate change legislation, changes in the cost of the fossil fuels that will be avoided by the biomass plant, third-party contractual unit participation and the completion timeframe of the facility..."<sup>162</sup>

At the time, GRU personnel estimated that the potential value (i.e., net present value) to the City over the 30-year term of the PPA would range from \$212 million to \$492 million, but that the value depended on "various sensitivities, such as project completion date, implementation of renewable portfolio standard and/or carbon constraint legislation..."<sup>163</sup> In addition, GRU estimated that the monthly fuel adjustment impact on a typical GRU customer/ratepayer (1000 kWh/month) could range from \$4 to \$8 in 2014, "assuming approximately one-half contractual third party participation" (i.e., GRU's ability to resell up to 50% of the 100 MW of generated electricity to someone else at market rates).<sup>164</sup>

As is evident from the comments made to the City Commission and the public in 2009, the success, and potential impact of the GREC PPA on GRU's ratepayers, was significantly dependent on various 'assumptions' about "changes in the costs of fossil fuels," the "implementation of renewable portfolio standard and/or carbon constraint legislation," and "contractual third party participation."

Ultimately, the actual impact has, and could continue to be, larger than anticipated due in part to the Equitable Adjustment, as previously discussed, and GRU's inability to involve "approximately one-half contractual third party participation" as assumed in May 2009; a factor that is driven by certain variables that are largely outside the control of either GRU or GREC. As such, questions continue as to the ultimate potential benefit or cost of the biomass-facility and the outlook for the

<sup>&</sup>lt;sup>159</sup> Power Purchase Agreement for the Supply of Dependable Capacity, Energy and Environmental Attributes from a Biomass-Fired Power Production Facility, by and between, Gainesville Renewable Energy Center, LLC and The City of Gainesville, Florida dated as of April 29, 2009

<sup>&</sup>lt;sup>160</sup> City of Gainesville, Meeting Agenda, May 07, 2009, City Commission

<sup>161</sup> Ibid

<sup>162</sup> Ibid

<sup>163</sup> Ibid

<sup>164</sup> Ibid

various "sensitivities" described to the City Commission in May 2009 including changes in the price of fossil fuels, third-party contract participation, and the implementation of carbon constraint legislation and/or a renewable portfolio standard (RPS) in Florida, among others.

### B. Scope of Work and Objectives

As with other areas of the Investigative Review, we have relied upon information gathered through our discussions with GRU/City staff, elected officials and citizens, information obtained from previous collections of documents regarding the City's future power needs, the Gainesville Citizen's Care lawsuit, GREC arbitration, and responses to Public Records Requests. We also have identified numerous documents and electronic files prepared in relation to GRU's IRP and the evaluation of its long-term energy supply needs, the GREC PPA, and analyses of the potential costs and benefits of the GREC PPA to GRU's ratepayers. Many of the documents and information were obtained through Navigant's efforts to identify, preserve and collect electronically-stored information from the email archiving and network file shares for GRU and the City.

### C. Summary Findings and Observations

- In hindsight, GRU's decision to pursue a renewable energy based option to meet its forecasted energy needs, rather than the use of a more conventional fuel source as originally recommended, is one of the primary causal factors for the issues faced today. While commendable for its efforts to pursue a leading role in energy conservation and the adoption of renewable energy based generation, the City's decision to pursue a non-conventional alternative in a biomass fueled power generation plant had significant additional risk that was not adequately assessed or managed.
- In addition, many of the City's underlying assumptions (and bases) for pursuing a longterm energy supply through a biomass option have proven to be inaccurate as of the date of this Report. While any long-term planning necessitates assumptions, some with greater uncertainty than others, those assumptions should have been evaluated (and re-evaluated) under varying scenarios and risk management efforts.
- Despite adverse trends and expressed concerns regarding GRU's need for additional base load generation, the potential for Federal carbon tax legislation and renewable portfolio standards (RPS) in Florida, and the projected price of natural gas (all of which were key determinants in GRU's decision), GRU and the City proceeded with the GREC PPA. However, it also is important to point out that GRU is only in the second year of a 30-year PPA and, while costs associated with purchased power from the GREC facility are higher than conventional alternatives, (which was known from the outset), the future may yet prove the value of the GREC PPA to GRU and its customers.
- While the GREC facility, and purchase of power under the GREC PPA, did not become operational until 2013, the current and future potential impact of the GREC PPA has been exacerbated by various aspects of the GREC contract that added risk to GRU and the City as previously discussed (e.g., GRU's decision to take 100% of the GREC output). The singlelargest factor influencing GRU's current operations, and the GREC PPA's impact on GRU's

ratepayers, is their inability to resell a significant portion of the unneeded GREC power. This has been exacerbated both by GRU's declining need and load forecast, and the significant cheaper price of power generated from alternative fuel sources (i.e., natural gas).

- In essence, GRU has been wrong, to date, on almost all of the key determinants it has continually referenced in supporting the need for the GREC biomass facility including the forecasted demand for electricity from GRU customers, the volatility and price of fossil fuels, federal carbon tax legislation and state renewable portfolio standards, and GRU's ability to resell any power that it does not need. In addition, there were times throughout the contract negotiations, determination of need and permitting processes where GRU had the opportunity to reevaluate the key determinants of their decision, but continued to fully support their decision, perhaps to the detriment of more effective risk management efforts (i.e., had they been more pragmatic with their views of current trends and conditions).
- However, while the City Commission's requested termination for convenience or "back out" clause would have provided GRU and the City with the ability to exit the current PPA at some predetermined point, we have seen no indication that either GRU or the City Commission would have pursued that alternative had it been available. Further, even absent the referenced clause, GRU and the City Commission had other opportunities to reevaluate the prudence of continuing forward with the PPA, and chose not to.
- While costs of production and rate impacts were evaluated, they do not appear to have been significant drivers in the City Commission's ultimate decision to pursue a biomassfueled generation option. However, while the costs associated with electrical power from the GREC PPA have been at the forefront of concerns over GRU's increasing electrical rates, in reality there were numerous factors that contributed to GRU's increased cost of electricity including:
  - A substantial multi-year capital improvement/expenditure program across GRU's service lines that started in 2006 and included a significant upgrade to the Deerhaven 2 plant, the construction of the Eastside Operations Center, and the implementation of a new IT billing/customer management system;
  - The aggressive implementation of energy efficiency and Demand Side Management (DSM) programs to promote energy conservation with the City and GRU's customers; and
  - The need to maintain gross revenues and significant general fund transfers to the City despite a declining base of electric customers and overall energy use per customer.
- In addition, through the evaluation of the decision to pursue a biomass power generation option, and the negotiation of the GREC PPA, there appears to have been limited assessment (and/or projections) of the overall/combined impact of these various factors on GRU's electric rates and ratepayers.

- While there have been various factors contributing to GRU's increase in electrical rates, the GREC PPA, without efforts to mitigate or restructure the existing contract, may have a long-term impact to the City and its ratepayers. However, much of this continues to depend on the initial set of key determinants cited by GRU at the start of the evaluation process for a long-term energy supply including GRU's forecasted load growth, fossil fuel prices, and the future direction of climate change regulation in the U.S., as well as the State of Florida.
- Although a significant change in any of these determinants could have a positive impact on GRU's ability to more effectively integrate the GREC power into its generation mix, and lessen the impact to GRU's ratepayers, the short-term outlook for such changes is not positive. Although factors influencing GRU's demand growth have improved (i.e., number of customers, average kWh usage), improvement in other factors is also dampening growth (i.e., energy efficiency, distributed generation). In addition, while interest in and the pursuit of renewable forms of energy continues to increase, current trends are moving away from biomass with more focus being directed at wind and solar. Further, low fossil fuel prices appear to be here to stay for the foreseeable future. Regardless of these trends, the concept of carbon tax legislation, was well as ongoing efforts by the Environmental Protection Agency (EPA) to regulate fossil fuel usage through controls over emissions, still lead many to believe that future regulations will ultimately drive up the cost of power associated with fossil fuels to the benefit of renewable energy like biomass. However, this seems unlikely in the near-term.
- In hindsight, GRU should have established, and maintained, an effective risk management
  program with continual assessment, and benchmarking or baselining, back to the original
  key assumptions, drivers and risks affecting the success of the GREC PPA, as well as the
  impact to GRU's customers. As discussed throughout this report, the key drivers included
  GRU's forecast for base load generation, federal and state legislation, GRU's ability to resell
  a significant amount of the GREC PPA power, alternative (fossil) fuel prices, and the impact
  to ratepayers.
- The shifting priorities on long-term electrical generation needs, significant market and regulatory uncertainties, and the lack of continuity in the senior management at GRU and City elected officials, made effective planning, as well as risk management, paramount to the success of the biomass effort. While GRU and the City Commission certainly made significant efforts in relation to all of these areas, the complexity of managing through significant change underscores the importance of clear strategic objectives, a seasoned and committed management team, and effective communication between a utility and its governing body.

### D. Evaluation, Analysis and Observations

While questions and concerns continue with regard to the future potential benefit or cost of the GREC PPA, as well as the evaluative process and decision-making that led to GRU's current situation, in retrospect the GREC PPA was the culmination of a long-term process involving numerous parties and public meetings where most of the potential risks were identified and

discussed. In hindsight, much of GRU's current issues with the GREC PPA stem from the City's initial decision to pursue a biomass-fueled electrical generation option, with the known risks identified, knowing that it was a higher-cost option, and with the known fact that many of the costs and risks would be outside of their control. The challenges faced in undertaking such a task with many risks and uncertainties were further exacerbated by the lack of a formal risk management process at GRU and the lack of continuity in GRU senior management and the elected officials.

1. The Risks of a 100 MW Biomass Plant were Known

Throughout its assessment of the various generation alternatives, the key risks were known by GRU and the City Commission, and openly discussed. While GRU and the City Commission had frequently communicated the City's growing demand for electricity, and that the biomass alternative would be more costly, GRU and the City Commission assumed that potential changes in market and regulatory conditions eventually would drive the unfavorable economics of a biomass project into more favorable territory...however, that has yet to happen.

a) The Key Drivers and Risks were Identified by GRU

As evidenced from some of its earliest presentations in 2004 regarding the consideration of conservation and renewable energy in its long-term electrical supply plans, GRU, the City Commission, and others were aware of the significant risks associated with a long-term energy supply plan, as well as the importance of managing those risks; risks that continued to be echoed through the many presentations and reports prepared by, or in connection with, GRU's efforts to develop a long-term energy supply plan. 165



From its initial assessment of a dedicated biomass-fueled generation option through the execution of the GREC PPA, GRU and the City Commission's decision was driven primarily by the perception, and belief, in certain key variables including:

- The need for base load capacity to meet increasing demand;
- Concern regarding the price and volatility of natural gas;
- Growing concern for the environment and impact of Greenhouse Gases;
- That renewable energy would be more costly than fossil fuels;

<sup>&</sup>lt;sup>165</sup> Gainesville Regional Utilities' Long Term Electrical Supply Plan, Presented to Alachua County Board of County Commissioners, November 23, 2004

- The need to resell excess capacity during the initial years; and
- That federal carbon tax legislation and/or a Florida RPS were imminent.

In the RFI and RFP process, GRU emphasized the same key points "as givens" for the City Commission's consideration of proposals including:

- We will continue to do maximum cost-effective conservation;
- Additional power supply will be needed;
- It is very likely that Renewable Energy Portfolio Standard and Carbon Constraint Legislation will be imposed in the next few years; and
- Interest in Biomass resources are increasing rapidly (noting RFI's by JEA and FPL).<sup>166</sup>

The evaluation criterion also emphasized the impact to GRU's environmental and social footprint, and carbon intensity (i.e., the proposed project "must reduce GRU's carbon intensity for electric generation"), and that GRU staff had "a sense of urgency – not in our customers best interest to be trailing the market especially since renewable resources are limited in Florida."<sup>167, 168</sup>

Many of the same factors were addressed by GRU in its presentation to the City Commission on May 7, 2009 in support of approving the GREC PPA, as well as before the Florida PSC during the Determination of Need hearing on the GREC facility.<sup>169, 170</sup>

### Issues Affecting Our Customers

- Concern about climate change
- Highly volatile natural gas and coal prices
- Pending legislation and regulations
   Carbon emission constraints
  - Renewable energy portfolio standards
- Our need to replace generation capacity
- Sky rocketing costs for new capacity

However, most of these variables were, and still are, essentially outside of GRU's (or GREC's) control, and the potential impact (i.e., benefit or cost) of the PPA will depend on these various market and regulatory driven factors.

b) Biomass (and Dedicated Biomass Plants) were Uncommon in Florida

In addition to the various risks and challenges associated with pursuing the development of any long-term electrical generation asset, the use of dedicated biomass plants, especially of the size contemplated by the City, was not widespread.

<sup>&</sup>lt;sup>166</sup> Designing an Energy Supply Plan: Results from the "All Source Solicitation", presentation to the Gainesville City Commission, May 10, 2007

<sup>&</sup>lt;sup>167</sup> Ibid.

<sup>&</sup>lt;sup>168</sup> City of Gainesville Regional Utilities, Addendum No. 4, Energy Supply Development Request for Letters of Interest, RFI No. 2006-169)

<sup>&</sup>lt;sup>169</sup> Contract for Biomass-Fueled Generation, Presentation to the Gainesville City Commission, May 7, 2009

<sup>&</sup>lt;sup>170</sup> Protecting GRU's Customers with Fuel Diversity, Renewable Energy, And Power Purchase Contract Design, Presentation to the Florida Public Service Commission by the Gainesville City Commission, December 9, 2009

VII. Financial Impact of the PPA and Outlook for Biomas
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In 2008, and at the time of GRU's decision to move forward with negotiating a contract with GREC for a biomass-fueled electrical generation system, biomass was the predominant form of renewable energy in Florida. However, solid biomass from wood and wood by-products accounted for only 380 MW of nameplate capacity (less than GRU's total nameplate capacity from all sources), and was less than 25% of the total renewable energy installed base.<sup>171</sup>

At the time, there were approximately 18 facilities and 380 MW of wood and

Florida's Current Renewable Energy Installed Base – Nameplate Capacity [MW] <sup>1</sup>	
Solar – PV <sup>2</sup>	1.8
Solar - Water Heating > 2 MW <sub>th</sub>	0
Solar - CSP	0
Wind - Onshore	0
Wind – Offshore	0
Biomass – Solid Biomass	
Municipal Solid Waste	520
Agricultural Byproducts	191
Wood/Wood Products Industry	380
Biomass – Landfill Gas	55
Biomass – Anaerobic Digester Gas	0
Waste Heat	370
Ocean Current	0
Hydro	62
Total	1,579.8

wood waste biomass capacity installed in Florida (primarily used in the pulp and paper industry), and none put in-service since 1994. In addition, the largest of the existing wood and waste biomass facilities was less than half the 100 MW facility ultimately proposed by Nacogdoches and agreed to by GRU and the City Commission in the GREC PPA.<sup>172, 173</sup> A summary of the existing wood/wood waste installations in Florida is displayed in the table below:

	Existing Wood/Wood Waste Installations in Florida			
Wood/Wood Waste Unit	Owner	Nameplate Capacity (MW)	Technology	In- Service Year
Buckeye Florida LP <sup>2</sup>	Buckeye Florida LP	8.2	Steam Turbine	1953
Buckeye Florida LP <sup>2</sup>	Buckeye Florida LP	14.8	Steam Turbine	1956
Buckeye Florida LP <sup>2</sup>	Buckeye Florida LP	11	Steam Turbine	1964
Buckeye Florida LP <sup>2</sup>	Buckeye Florida LP	10.4	Steam Turbine	1965
Georgia Pacific	Florida Power & Light Co	N/A	Steam Turbine	1983
Jefferson Power LLC	K & M Energy Inc	7.5	Steam Turbine	1990
Palatka <sup>2</sup>	Georgia Pacific Corp	9.7	Steam Turbine	1956
Palatka <sup>2</sup>	Georgia Pacific Corp	47.8	Steam Turbine	1965
Palatka <sup>2</sup>	Georgia Pacific Corp	32	Steam Turbine	1993
Jefferson Smurfit Corp (FL) <sup>2</sup>	Smurfit-Stone Container Corp	44	Steam Turbine	1988
Panama City Mill	Smurfit-Stone Container Corp	20	Steam Turbine	1956
Panama City Mill <sup>2</sup>	Smurfit-Stone Container Corp	4	Steam Turbine	1930
Panama City Mill <sup>2</sup>	Smurfit-Stone Container Corp	10	Steam Turbine	1949
Panama City Mill <sup>2</sup>	International Paper Co	39.6	Steam Turbine	1981
Panama City Mill <sup>2</sup>	International Paper Co	43.2	Steam Turbine	1981
Rayonier Fernandina Mill <sup>2</sup>	Rayonier, Inc	20	Steam Turbine	1950
Ridge (FL)	Ridge Generating Station LP	45.5	Steam Turbine	1994
Telogia Power	Telogia Power LLC	14	Steam Turbine	1986

<sup>&</sup>lt;sup>171</sup> Florida Renewable Energy Potential Assessment, Prepared for Florida Public Service Commission, Florida Governor's Energy Office, and Lawrence Berkeley National Laboratory, December 29, 2008

<sup>&</sup>lt;sup>172</sup> Florida Renewable Energy Potential Assessment, Prepared for Florida Public Service Commission, Florida Governor's Office, and Lawrence Berkeley National Laboratory by Navigant Consulting, Inc., December 29, 2008

<sup>&</sup>lt;sup>173</sup> Navigant Consulting sourced the information in the table from Energy Velocity, a database provide by Ventyx, Inc. at the time.

c) The Risks were Highlighted by Independent Reports

The inherent risks in the GREC PPA and biomass project also were echoed by citizens, independent industry reports, and the Florida PSC during the approval process for the GREC plant. In August 2008, the Florida PSC, in cooperation with the Governor's Energy Office and the Lawrence Berkeley National Laboratory, engaged Navigant to perform an assessment of renewable energy resources in Florida including an assessment of the projected availability and cost of renewables through the year 2020.<sup>174</sup> Navigant's report was submitted to the Florida PSC December 29, 2008.<sup>175</sup>

Navigant's report identified ten key drivers that could impact renewable energy development in Florida at the time, which are summarized in the table below:

Drivers	Definition and Explanation
Commodity Prices	Level of inflation in commodity prices (including steel, concrete, and oil, but not natural gas, coal or nuclear materials) will influence RE and traditional power installed costs over time.
Consumer Demand	Degree of consumer and societal demand/support for RE (e.g., through green marketing programs) and environmentally friendly energy policies can influence RE adoption.
Fossil Fuel Prices	In addition to future RE installed costs, RE technology's competitiveness with fossil fuels out into the future will drive their adoption.
GHG Policy	This driver is based on Navigant Consulting's assessment that national or regional greenhouse gas (GHG) policy is highly likely by 2020. It examines the aggressiveness of this policy, which will influence the cost of electricity generation from traditional fuels against which RE competes.
Load Growth	The rise in electricity demand, based on established rates of economic, population, and electricity consumption growth (including the impacts of efficiency and smart grid) can influence RE demand.
RE Financial Incentives	Strength of the federal and state policies providing financial incentive for RE projects will drive RE competitiveness. The focus is on select incentives: the federal production tax credit (PTC), investment tax credit (ITC), as well as the state PTC, ITC, and sales tax exemption.
RE Regulatory Framework	The scope and form of RE regulation can influence RE adoption. This driver will primarily focus on the creation of an RPS and the resulting renewable energy credit (REC) market.
RE Tech Improvements	RE technologies' installed costs change over time (driven by learning curve impacts, efficiency improvements, and technology breakthroughs), which alters their competitiveness relative to traditional generation and therefore influences adoption.
Credit Markets	The availability of and cost of debt financing will influence RE project economics.
Transmission Investment	Development, or lack, of adequate transmission capacity to allow continued growth in renewable electricity generation and delivery can impact RE adoption.

The Navigant report to the Florida PSC also further ranked the most significant risks (i.e., key drivers) into matrix ranking the factors on a scale based on those with the lowest to highest "Relative Impact" on renewable energy adoption, and those with the least to the most "Relative Uncertainty." The matrix cited by Navigant in its report is provided below:

<sup>&</sup>lt;sup>174</sup> Public Service Commission, State of Florida, Memorandum, Date: December 31, 2008, From: Office of the General Counsel, Office of Strategic Analysis and Governmental Affairs, To: Office of Commission Clerk, Re: Docket No. 080503 – EI – Establishment of rule on renewable portfolio standard

<sup>&</sup>lt;sup>175</sup> Florida Renewable Energy Potential Assessment, Prepared by Navigant Consulting for Florida Public Service Commission, Florida Governor's Energy Office, and Lawrence Berkeley National Laboratory, Dated December 29, 2008



Navigant's assessment noted the high level of relative uncertainty and impact on renewable energy adoption associated with "Fossil Fuel Prices," "GHG (i.e., greenhouse gas) Policy," "Renewable Energy Incentives" (e.g., Federal Renewable Energy Credits, or RECs) and "Renewable Energy Regulatory Framework" (e.g., the potential for a RPS in Florida) – all of which were critical to GRU and the City Commission in their decision to pursue the biomass power generation option.

Navigant's efforts evaluated three general scenarios for the development of renewable energy in Florida (i.e., unfavorable, mid-favorable, and favorable) and assessed each relative to the key drivers listed above. Navigant's report was followed by GRU and forwarded to representatives at Nacogdoches for their consideration. In short, upon review of Navigant's report, the Florida PSC concluded that economic and policy considerations were generally unfavorable to support further renewable development in Florida.

<u>Current economic and policy conditions generally coincide with Navigant Consulting's</u> <u>unfavorable scenario for future renewable development</u> [emphasis added]. Specifically, the unfavorable scenario for carbon pricing assumes \$0/ton initially, then scaling to \$10/ton by 2020. Currently, <u>there is no federal or state policy establishing carbon pricing</u> [emphasis added]...Currently, credit markets are extremely tight and it is uncertain when conditions will improve. Navigant Consulting assumes natural gas costs to be \$5-\$6/MMBtu in the unfavorable scenario. Currently, natural gas is trading at \$5.70/MMBtu.<sup>176</sup>

The Florida PSC further observed that even under the "mid-favorable" scenario "that there would be no growth in the biomass direct combustion or waste to energy sectors over the next 12 years."

<sup>&</sup>lt;sup>176</sup> Public Service Commission, State of Florida, Memorandum, Date: December 31, 2008, From: Office of the General Counsel, Office of Strategic Analysis and Governmental Affairs, To: Office of Commission Clerk, Re: Docket No. 080503 – EI – Establishment of rule on renewable portfolio standard

d) The Risks were Further Emphasized by the Florida PSC

GRU is subject to limited oversight by the Florida PSC as to certain aspects of their business including safety, rate structure, territorial boundaries, and bulk power supply, among others.<sup>177</sup> On September 8, 2009, pursuant to Section 403.519, Florida Statutes (F.S.) and Rule 25-22.080 and 25-22.081, Florida Administrative Code, GRU and GREC filed a joint petition to determine need with the Florida PSC for the proposed biomass-fueled power generation facility. Section 403.519, F.S. requires the Florida PSC take certain aspects into account when evaluating the determination for need of an applicant including:

"...the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, whether the proposed plant is the most cost-effective alternative available, and whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available."

After evaluation of the joint GREC and GRU filing, including consideration of concerns expressed by intervenors in the process, as well as information obtained through various opportunities for public comment, the Florida PSC granted GRU and GREC's joint petition on June 28, 2010 by a 3-2 vote of the commissioners.<sup>178</sup> The PSC ultimately concluded that the GREC project would:

- Enhance the overall reliability of the GRU system;
- Satisfy a need for GRU to improve its fuel diversity and supply reliability;
- Promote development of renewable generation in Florida; and
- Become the most cost-effective alternative if pending legislation regarding CO2 emissions is enacted.<sup>179</sup>

In supporting its decision, the Florida PSC noted that GRU's efforts were consistent with the State's efforts to promote the development of renewable energy (Section 366.92(1), F.S.) and its efforts to encourage municipal utilities to "...develop standards for the promotion, encouragement, and expansion of renewable energy resources and energy conservation and efficiency measures" (Section 366.92(5), F. S.).

However, the Florida PSC also raised significant questions and concerns regarding GRU's "need" for the proposed generation and whether the proposed facility was the most cost-effective alternative available. More specifically, the PSC observed that:

- GRU did not have a capacity need until 2023;
- GRU did not evaluate whether there were conservation measures that could further mitigate the need for the GREC biomass facility;

<sup>&</sup>lt;sup>177</sup> Chapter 366, Florida Statutes, as of December 2013

<sup>&</sup>lt;sup>178</sup> Final Order Granting Petition for Determination of Need for Proposed Biomass Plant, Docket No. 090451-EM, Order No. PSC-10-0409-FOF-EM, Issued: June 28, 2010

<sup>179</sup> Ibid

- There was considerable uncertainty about the economics of the project, and that overall
  cost-effectiveness of the project was "heavily dependent upon the cost of future carbon
  regulation, and the potential resale of half the projects capacity;" and
- The economic impact to GRU could range from "a loss of approximately \$56 million...using current environmental regulations, fuel forecasts, and market assumptions" or a savings of approximately \$48 million if "pending environmental regulations are enacted, and GRU resells half of the capacity at full contract price."<sup>180</sup>

In closing, the Florida PSC noted that while GRU and the City had made a strategic decision to pursue the GREC project, and that they had made many efforts to inform GRU's customers of the potential rate impacts, that the City Commission still had obligations to GRU's ratepayers. It further urged GRU and the City to mitigate the potential ratepayer impact associated with the proposed biomass plant through risk management efforts aimed at addressing the following issues:

- The need to sell excess generation capacity from the proposed biomass unit;
- The need to continue to sell excess generating capacity associated with GRU's existing generating units on the wholesale market or through power purchase agreements;
- The need to contractually source a long-term fuel supply for the proposed biomass generating unit at favorable pricing; and
- The need to continue to evaluate the financial viability of the proposed biomass generating unit in relation to pending environmental regulations.<sup>181</sup>

Similar concerns were emphasized in a dissenting opinion by Florida PSC Chairman Argenziano who asserted that "a significantly slacker standard" had been applied to the determination for need, that the project "did not satisfy statutory requirements for approval of need...," that the "provision of electricity at a reasonable cost is too uncertain and constitutes an unnecessary gamble," and that "conservation measures would only further mitigate the need for the proposed plant."<sup>182</sup>

GRU's message regarding the need for additional electrical generation and the various market conditions and trends has been consistent from 2003 through most of the decision-making process with regard to the GREC PPA and the GREC facility. However, many of the underlying concerns and assumptions have not yet materialized, or materialized to the extent believed by GRU at the outset; and the conditions for many, in fact, seem less favorable or are trending in the opposite direction to what was expected.

180 Ibid

 $<sup>^{181}</sup>$  Ibid

<sup>182</sup> Ibid

At the time of its preliminary IRP in 2003, GRU forecasted that its summer peak demand would be almost 800 MW by 2022.183 At present, GRU forecasts that its summer peak demand may not exceed 450 MW by that same time period (i.e., almost 45% less than originally forecasted). As is depicted in the adjacent chart, GRU's forecasts have continued to decline over the years.184

Similarly, GRU's forecast of the residential sales of electricity in MWh displays a similar trend with original forecasts at the time of GRU's RFP for the biomass fueled facility projecting a steady increase in sales over the forecast period.185 However, beginning with subsequent forecasts in 2009 and later, the decline in customer growth, as well as the significant decline in average demand per customer, have resulted in significant declines in forecasted sales of, and ultimately the need for, electricity.





185 Ibid

2. GRU's Need/Demand for Electricity Significantly Changed

<sup>&</sup>lt;sup>183</sup> Preliminary Integrated Resource Plan to Meet Gainesville's Electrical Needs through 2022, Presentation to the Gainesville City Commission, by Gainesville Regional Utilities, December 15, 2003

<sup>&</sup>lt;sup>184</sup> Gainesville Regional Utilities 2006, 2009 and 2014 Ten-Year Site Plans Submitted to: The Florida Public Services Commission (April 2006, April 2009 and April 1, 2014, respectively)

GRU's forecasted summer peak demand and electric sales to residential customers as displayed in the charts above were influenced primarily by a decline in load growth due to the declining growth in the number of residential customers, and a significant decline in average electric use per customer (see adjacent tables).<sup>186</sup> GRU's decline in average electric use per customer is attributed to a number of factors but primarily the success of its demand side management programs, the increased energy efficiency of many appliances, and GRU's overall emphasis on energy conservation with its customers.

While GRU currently forecasts a return to an increasing number of residential customers, in reality the forecasted average increase in the number of electric customers is not expected to make up for the decline in demand due to continued declines in





average electric usage per customer. In essence, GRU is not going to grow its way back to where they have a need for the additional power produced by the GREC plant, and certainly not back to a level consistent with their initial projections, which ultimately served as one of their reasons for additional generation in the first place.

<sup>&</sup>lt;sup>186</sup> Gainesville Regional Utilities 2006, 2009 and 2014 Ten-Year Site Plans Submitted to: The Florida Public Services Commission (April 2006, April 2009 and April 1, 2014, respectively)

Forecasted demand growth across the country follows similar trends. As reported by the Energy Information Administration (EIA), year over year demand for electricity decreased in 5 of the last 6 years since 2008, which was surprising given that demand only declined twice in the 58 years prior to 2008.187 The observed trend has been attributed to various factors including improved efficiency, the impact of higher electricity prices, tighter standards and



structural changes in the economy.<sup>188</sup>

"The vast majority of utilities are seeing minimal, stagnant or even negative load growth in their service territories. The industry is undecided on how to best address the issue of depressed electricity sales growth."<sup>189</sup>

The "Reference case" projection by the EIA in 2014 for projected annual end-use growth in electricity demand is approximately 1% in Florida, and less than 1% for the U.S., over the period 2012 – 2040. The EIA's "Low Growth case" projects a 0.0% increase in demand over the next 28 years, and only a 0.10% average increase in Florida.<sup>190</sup>

What is the best wa the impact of s	y for utilities to mitigate tagnant load growth?
Develop new unregulated business models	23%
Develop new regulated business models	22%
Revenue decoupling	17%
Increased fixed bill charges	14%
Offer premium power options to customers	13%
Lost revenue adjustment mechanism	5%
Other	5%

<sup>&</sup>lt;sup>187</sup> Implications of low electricity demand growth, 2014 EIA Energy Conference, July 14, 2014, Washington, DC, Jim Diefenderfer, Director, Office of Electricity, Coal, Nuclear, & Renewables Analysis

<sup>&</sup>lt;sup>188</sup> U.S. electricity growth in the Reference case, 1950-2040 – History: U.S. Energy Information Administration, Monthly Energy Review, September 2013, DOE/EIA-0035(2013/09) – Projections: AEO2014 National Energy Modeling System, run REF2014.D102413A.

<sup>&</sup>lt;sup>189</sup> 2015 State of the Electric Utility, Survey Results, Here's What the Utility of the Future Looks Like, According to Over 400 U.S. Electric Utility Executives, created by Utility Dive

<sup>&</sup>lt;sup>190</sup> The EIA "Reference case" is typically based on current laws and regulations and includes technologies that are commercial or reasonably expected to become commercial over the next decade or so. Definition from: Annual Energy Outlook 2013, 18<sup>th</sup> Annual Energy and Climate Change Research Seminar, Electric Power Research Institute, May 21, 2013, by J. Alan Beamon

3. Fossil Prices Significantly Declined and Stabilized

A key determinant cited by GRU in its efforts to promote additional coal-based electrical generation (initially), and then biomass-fueled electrical energy, was the volatility of natural gas prices. However, despite significant increases in the volatility and price of natural gas in 2008, which reinforced the opinions held by GRU and the City Commission since 2003, the U.S. natural gas industry was about to undergo a significant transformation.

Throughout its efforts to evaluate its long-term energy supply, GRU presented various graphs demonstrative of both the high cost of natural gas in certain periods, as well as the volatility of the prices.<sup>191</sup> In addition, most of the forecasts continued to project a significant escalation in natural gas prices into the future, despite the fact that prices had started to decline after the highs reached in 2008.

At the time of GRU's RFP in 2008, and at the time the PPA was executed by GRU and GREC in 2009, the EIA was still forecasting significant increases in natural gas prices over the planning horizon.<sup>192</sup>

Among other things, the cited 2008 Navigant report on renewable energy in Florida also observed that renewable energy "competitiveness with fossil fuels out into the future will drive their adoption."<sup>193</sup>





<sup>&</sup>lt;sup>191</sup> Community Dialogue Part II: Power our Future, Meeting Gainesville's Future Electric Needs, Sponsored by the Gainesville Energy Advisory Committee, October 7, 2003

<sup>&</sup>lt;sup>192</sup> Contract for Biomass-Fueled Generation, Presentation to the Gainesville City Commission, May 7, 2009

<sup>&</sup>lt;sup>193</sup> Florida Renewable Energy Potential Assessment, Prepared by Navigant Consulting for Florida Public Service Commission, Florida Governor's Energy Office, and Lawrence Berkeley National Laboratory, Dated December 29, 2008

Despite the forecasts, the price of natural gas has continued to fall. Regardless, the EIA still projects natural gas prices to rise in the coming years (and significantly from where they currently are) based primarily on the projected growth in the economy and demand for natural gas from the electric power and industrial sectors, as well as due to liquefied natural gas (LNG) exports.<sup>194</sup>



However, conventional wisdom and other sources tend to cast doubt on the EIA's projections as the abundance of natural gas discovered and being produced in connection with the U.S. shale gas revolution has depressed natural gas prices for the past several years...and many believe that it well into the future. A relative comparison of the increase in shale gas production per day from various shale plays across the country to the price of natural gas over the last fourteen years is provided in the table below.<sup>195</sup>



Starting in 2008, and building thereafter, the rapid increase in the development of natural gas from unconventional sources (i.e., shale-gas) ultimately led to a significant, and sustained reduction, in the price of natural gas. In turn, the low price of natural gas has, and is expected to continue to, put pressure on biomass and other renewable forms of energy making them less competitive with some

<sup>194</sup> U.S. Energy Information Administration, Annual Energy Outlook 2014

<sup>195</sup> Ibid

regulatory or legislative policies supporting or encouraging their more rapid adoption.

A recent report "North American Natural Gas Market Outlook" by Navigant provided a natural gas supply and price outlook through 2035 noting the continued growth in North American natural gas production in 2014 and how increased supply has pushed natural gas prices (Henry Hub) down to levels not seen this decade.196 The Navigant report also described the new market conditions as "abundant supply, lower prices, and the potential of natural gas as a practical alternative to address climate change." The adjacent charts were provided in connection with the natural gas supply and price outlook to 2035.





4. A Florida RPS or Federal Carbon-Tax Legislation has not been Passed

GRU and the City Commission also believed that carbon tax legislation and/or a Florida RPS were imminent. This belief greatly influenced the City and GRU in their decision to pursue biomass to meet the future energy demands believing that it would provide one of the best hedges against such policy in the future, especially given their significant dependence on coal.

The emphasis on global warming, climate change and renewable energy, both nationally and in the state of Florida, was omnipresent throughout the duration of GRU's and the City's evaluation of energy sources, issuance of the RFP, and negotiation and execution of the PPA.

<sup>&</sup>lt;sup>196</sup> Navigant Oil & Gas Market Notes, North American Natural Gas Market Outlook, Year-End 2014: A View to 2025

RPS are policies designed to increase generation of electricity from renewable resources by encouraging or requiring electricity producers in a given area to supply a certain amount of their electricity from renewable energy sources. Generally, these sources include wind, solar, geothermal, biomass and some types of hydroelectricity, but may include other resources such as landfill gas, municipal solid waste, and tidal energy.



States with Renewable Portfolio Standards (mandatory) or Goals (voluntary),

During this time-period, renewable energy legislation made big strides, both nationally and in Florida. However, although several RPS proposals have advanced part way through the U.S. Congress in recent years, there is currently no RPS program in place at the federal level, and the last state to implement a RPS was in 2009. The following is a brief summary of Florida and Federal efforts with regard to climate change and RPS legislation:

#### Florida Legislation:

In 2006, the Florida legislature added Section 366.92 - Florida Renewable Energy Policy to the Florida Statutes, authorizing the Florida PSC to establish appropriate "goals" for renewable energy generation in the state.<sup>197</sup>

In June 2007, the Florida PSC rejected a proposal to build a coal-fired power plant by a 4-0 vote, marking the first time global warming had ever played a role in a Florida PSC's decision, and the first time in 15 years the agency rejected a new power plant.<sup>198</sup>

On July 13, 2007, Governor Crist signed two Executive Orders. Executive Order Number 07-126 stated that "Florida is committed to becoming a leader in reducing emissions of greenhouse gases which are changing Earth's climate..."<sup>199</sup> Executive Order Number 07-127 stated that "Not later than September 1, 2007, they should initiate rulemaking to require that utilities produce at least 20% of their electricity from renewable sources (Renewable Portfolio Standard) with a strong focus on

<sup>&</sup>lt;sup>197</sup> Florida's Efforts to Develop a Renewable Portfolio Standard, Florida Department of Environmental Protection, Central District 13<sup>th</sup> Annual Power Generation Conference, dated July 30, 2009

<sup>&</sup>lt;sup>198</sup> "Fla. Utilities dump coal-fired power plant. Gov. Charlie Crist says climate change played a role in plans." By Steve Bousquet and Craig Pittman published July 4, 2007.

<sup>&</sup>lt;sup>199</sup> State of Florida, Office of the Governor, Executive Order Number 07-126

solar and wind energy..."<sup>200</sup> The Executive Order also established Greenhouse Gas (GHG) emission reduction targets for the State of Florida.

On May 28, 2008 Governor Crist signed the 2008 Florida Energy Bill, HB 7135 into law. This bill codified many of the provisions contained in Governor Crist's 2007 Executive Orders. The bill i) authorized the Department of Environmental Protection (DEP) to develop cap-and-trade regulations for GHG emissions for sources in Florida, subject to legislative ratification in the 2010 Regular Session; ii) expanded key economic development programs to attract specific investment in the renewable energy sector in Florida; and iii) required the PSC to develop rules for a renewable portfolio standard subject to legislative ratification in the 2009 Regular Session<sup>201</sup>

An e-mail dated May 19, 2008 from Ed Regan to Moody's rating agency commented on the 2008 Florida Energy Bill and how it would impact GRU, noting that GRU's pursuit of the biomass plant (among other things) is "predicated in part on hedging against cap-and-trade and renewable portfolio standards at either state or federal level."<sup>202</sup>

At the January 9, 2009 Special Agenda Conference, the Florida PSC voted to submit to the Legislature a draft RPS rule. The RPS would have required each Investor Owned Utility (IOU) to achieve 20% renewable energy by 2020. A version of the bill went before the House and Senate, but the legislation never passed.<sup>203, 204</sup> To date, Florida has not adopted any type of RPS and there have been no bills introduced that will do so during the 2015 legislative session. In addition, and to the contrary, there have been recent efforts across states to weaken or dismantle existing policies including the recent passage of a bill in West Virginia that repealed its RPS (HB 2001) and similar efforts in Texas being considered by the Texas Legislature.

#### National Legislation:

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The America's Climate Security Act of 2007 was a global warming bill considered by the U.S. Senate to reduce the amount of greenhouse gases emitted in the US.<sup>205</sup> The legislation was introduced on October 18, 2007 and approved by the Senate Committee on December 5, 2007 by an 11-8 vote. The bill would have imposed emission limits on electric utility, transportation, and manufacturing industries at 2005 levels by 2012.<sup>206</sup> The bill was debated in the Senate during the week of June 2, 2007 and eventually fell short of the 60-vote threshold it needed to move to final consideration.

As of today, 29 States plus Washington D.C. have a renewable portfolio standard. Another eight states have less formal renewable energy goals. Florida, along with 12 other states, has neither.<sup>207</sup>

<sup>&</sup>lt;sup>200</sup> State of Florida, Office of the Governor, Executive Order Number 07-127, Section 3

<sup>&</sup>lt;sup>201</sup> History and Status of State Actions, 2008 Center for Climate Strategies: <u>www.flclimatechange.us</u>

<sup>&</sup>lt;sup>202</sup> Email from Ed Regan to Dan Aschenbach, Subject: How Florida's 2008 Energy Bill will affect GRU

<sup>&</sup>lt;sup>203</sup> Draft Renewable Portfolio Standard Rule dated January 30, 2009

<sup>&</sup>lt;sup>204</sup> Florida's Efforts to Develop a Renewable Portfolio Standard, Florida Department of Environmental Protection, Central District 13<sup>th</sup> Annual Power Generation Conference, dated July 30, 2009

<sup>&</sup>lt;sup>205</sup> U.S. Sen Joseph I. Lieberman, et al. (2007), "S. 2191, America's Climate Security Act of 2007"

<sup>&</sup>lt;sup>206</sup> Is the latest climate change bill getting warmer? By Stephanie I. Cohen, published November 1, 2007

<sup>&</sup>lt;sup>207</sup> Renewable Portfolio Standards in the United States: A Status Update, Galen Barbose, Lawrence Berkeley National Laboratory, Renewable Energy Markets 2014, December 4, 2014

5. Biomass was Known to be More Costly than Traditional Alternatives

The inclusion of some amount of renewable energy was always part of the conversation regarding a long-term electrical supply for GRU.<sup>208, 209</sup> It also was generally known that renewable energy, including biomass, was more expensive than more conventional fuel sources. However, it also was believed that the biomass option was one that potentially could have significant rewards if current trends in the U.S. continued to favor more renewable forms of energy.

Many presentations to the City Commission and others highlighted the different factors for consideration including the relative costs (e.g., that renewable resources "cost more to produce" and that they "must determine if customers will pay more)."<sup>210</sup> Some of these presentations also estimated the potential impact to monthly electric bills from different energy sources.

While solar at the time was prohibitively expensive, biomass was seen as an option roughly equivalent in cost to power generated through "Combined-Cycle" natural gas, but still more costly than coal.

Similarly, a report published by the Florida PSC in January 2003 - An Assessment of Renewable Electric Generating Technologies for Florida - observed that electricity produced from renewable technologies was usually more expensive than



Plant Type	Levelized Costs (cents/kilowatt hour)
Municipal Solid Waste	3.5-15.3¢*
Biomass (direct combustion)	6.3 - 11.0¢
Landfill Gas	2.4 - 6.3¢
Hydro-electric	No Data
Solar Photovoltaic	19.4 - 47¢
Waste heat facilities using exothermic process	ses Zero fuel cost**
Natural Gas Combined Cycle	3.9 - 4.4¢
500 Megawatt Pulverized Coal	5.2 - 5.5¢
* This assumes a \$25 per ton tipping fee. Information presente- indicates that for Florida plants, a \$50 per ton fee is more typical an	d by Integrated Waste Services Association d thus production costs could be closer to 2¢.
** Zero fuel costs when part of a manufacturing process. Capital co estimated at \$2,300 per kW. Capital cost for replacement plant incr substantially less than above	st for retrofit of existing plants (up to 140 MW) emental generating capacity not available but

traditional technologies on a production cost basis (see the adjacent table). Biomass (direct

<sup>&</sup>lt;sup>208</sup> Preliminary Integrated Resource Plan to Meet Gainesville's Electrical Needs through 2022, Presentation to the Gainesville City Commission, by the Gainesville Regional Utilities, December 15, 2003

<sup>&</sup>lt;sup>209</sup> Opportunities to Expand Our Use of Renewable Energy Resources, Presentation to the Gainesville City Commission, Gainesville Regional Utilities, March 22, 2004

<sup>&</sup>lt;sup>210</sup> Community Dialogue Part II: Power our Future, Meeting Gainesville's Future Electric Needs, Sponsored by the Gainesville Energy Advisory Committee, October 7, 2003.
combustion) was assessed to be up to twice as expensive on a levelized cost basis (cents/ kilowatt hour) as compared to conventional fuel sources including Natural Gas Combined Cycle and Pulverized Coal.

The potential cost differences between biomass and other conventional sources were also evident in the results presented from the independent evaluation by ICF Consulting in March 2006.<sup>211</sup> The ICF report ultimately provided the basis for the City Commission's decision in April 2006 to proceed in developing a conceptual design for the all source solicitation with a focus primarily on biomass.<sup>212</sup>

Energy Supply Options Evaluated & Financial and Operation Results							
Plan Characteristics	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5		
Short Hand Label	CFB	IGCC	Small CFB +	Maximum	NGCC		
			Max. DSM	DSM			
Fuel for Base Load Unit	Coal, Pet	Coal, Pet	Biomass	Not	Natural Gas		
	Coke, Biomass	Coke, Biomass		Applicable			
Base Load Capacity	220 MW	220 MW	75 MW	None	240 MW		
Installed Cost (\$2003)	\$470 million	\$445 million	\$229 million	\$44 million	\$129 million		
Typical Residential Bill	\$167.68	\$157.54	\$180.59	\$181.77	\$179.51		
(1,000 kWh)							

Based on the ICF analysis, biomass had the highest potential impact on a typical residential bill among the generation alternatives considered. Ultimately, the City Commission ordered GRU to develop a conceptual design based on both the biomass option (Plan 3), and an IGCC option (Plan 2), with full knowledge that the biomass option would potentially lead to higher typical residential bill. The City Commission ultimately rejected the IGCC option due in part to the increased cost associated with developing an IGCC plant.

6. GRU has been Unable to Resell Excess Power under the GREC PPA

GRU's ability to resell power produced under the GREC PPA is dependent primarily on the average cost of wholesale power produced from competing fossil fuels, namely natural gas, as well as the potential for additional federal carbon-tax or state renewable portfolio legislation, which could increase both the cost of fossil fuels and the demand for renewable energy. With regard to fossil fuel prices, despite current forecasts by the EIA to the contrary, conventional wisdom and other forecasts have natural gas prices remaining low for the foreseeable future.

Likewise, based on current legislation pending before the Florida State Legislature, there is no indication that a RPS is currently being considered. Further, there is no pending federal legislation that would impose constraints on the use of carbon-based fuels. However, the EPA's Clean Power Plan developed under Section 111(d) of the Clean Air Act and proposed in June 2014, focuses on limitations on CO<sub>2</sub> emissions from existing power plants that could have a significant impact on the development, as well as retirements, of future coal generation in the U.S., but the CPP is currently facing serious legal and political challenges.

<sup>&</sup>lt;sup>211</sup> City of Gainesville Electrical Supply Needs (RFP No. 2005-147), by ICF Consulting, dated March 1, 2006

<sup>&</sup>lt;sup>212</sup> ICF Final Report (RFP No. 2005-147), Executive Summary and Decision Matrix, Prepared by Gainesville Regional Utilities, March 28, 2006

While GRU has expended effort over the years to market and resell the excess power from the GREC facility, it should have been readily apparent that their ability to off-load the power would be significantly constrained without favorable trends in fossil fuel prices and/or regulatory changes. Despite attempts to provide assurance to the City Commission in May 2009, and the Florida PSC in 2010 regarding the Petition to Determine Need, it does not appear that GRU ever had any reasonable third-party interest in the GREC power absent changes in the key drivers noted above.

"...our target price is significantly lower than your offer (\$70-90/MWh v. \$120/MWh)."213

*"The IOU's are reluctant to enter into wholesale above avoided cost because of cost recovery issues (they need a RPS!)"*<sup>214</sup>

"Ultimately, the extent of OUC's commitment to this project will depend on several factors, including cost, OUC's need for additional renewable generation, and the outcome of GRU's proceedings before the Florida Public Service Commission."<sup>215</sup>

Although GRU has undertaken efforts at various times to evaluate the market for the excess GREC power including early 2009 (prior to executing the PPA) and 2011 after receiving the GREC site and air permits, in reality GRU's risk mitigation strategy in relation to this key driver of success was limited primarily to wishful thinking.

7. Outlook for Renewable Energy (Biomass) Generation

The outlook for renewable energy depends in large part on the outlook for the energy industry as a whole, which is facing

significant change driven by various factors including declining demand growth, shifting sources of generation, emerging technologies, new market models, and the abundance of natural gas due to the U.S. shale-gas boom.

NAVIGANT

The supply of power from renewable energy has increased over the past decade. However, while electrical generation from wind and solar has increased significantly



<sup>&</sup>lt;sup>213</sup> Email from Jason Peters, Seminole Electric to Ed Regan, Subject: Gainesville Renewable Energy Center, Dated: March 27, 2009

<sup>&</sup>lt;sup>214</sup> Email from Ed Regan to Fred Haddad, Subject: RE: Gainesville Renewable Energy Center Project, Dated: June 1, 2009

<sup>&</sup>lt;sup>215</sup> Letter from Kenneth P. Ksionek, Orlando Utilities Commission to Robert E. Hunzinger RE: Gainesville Regional Utilities 100 MW Proposed Biomass Power Plant Need Determination Request, March 8, 2010

during this time period, electrical generation from wood biomass has not. Further, current trends suggest that the focus on future renewable energy development will be primarily on wind and solar going forward.

These trends are also not projected to change significantly in the future. The EIA forecasts that the use of biomass is expected to grow with almost 100% of that growth expected in co-firing, rather than dedicated units.



"Utilities plan to use more natural gas, solar, wind, distributed energy resources, and energy efficiency over the next 20 years. Meanwhile, the industry expects to use significantly less coal and oil."<sup>216</sup>

Similar trends have also been noted with regard to renewable generation in Florida, but with Florida experiencing a higher growth in biomass over the past decade relative to wind and solar as was the case, on average, with the rest of the U.S.

Based on statistics tracked for the Florida Reliability **Coordinating Council** (FRCC) area, electric generation in Florida over the past decade has largely shifted from coal, petroleum and nuclear based to natural gas. While coal still accounts for a significant portion of the generation in the state, the increase in natural gas has more than doubled, while other forms of energy have not increased significantly.



<sup>216</sup> 2015 State of the Electric Utility, Survey Results, Here's What the Utility of the Future Looks Like, According to Over 400 U.S. Electric Utility Executives, created by Utility Dive

The use of wood and other biomass in Florida is projected to more than double over the next 28 years but relative to the use of natural gas and coal, it is not believed that it will significantly increase as a proportion of overall electrical generation in Florida. The outlook presented by the EIA projects a more significant increase in the use of natural gas relative to other sources.

The significant decline in demand growth also is correlated with projections from the EIA as to generation capacity additions during the 2012 -2040 period. Intuitively, lower demand equals lower need for capacity and capacity additions. Even though coal capacity retirements are expected to increase significantly during this time period, no new coal plants are expected to be built to replace the older units as they retire.<sup>217</sup>





Most of the capacity additions are expected to come from natural gas and wind. In 2015, the EIA expects electrical generation companies to add more than 20 gigawatts (GW) of generation capacity

<sup>217</sup> Implications of low electricity demand growth, 2014 EIA Energy Conference, July 14, 2014, Washington, DC, Jim Diefenderfer, Director, Office of Electricity, Coal, Nuclear, & Renewables Analysis

with an estimated 91% of that new capacity coming from a combination of wind (9.8 GW), natural gas (6.3 GW) and solar (2.2 GW).<sup>218</sup>

The expansion of renewable energy capacity also appears to be effected by expiring incentives and general shifts in regulatory and policy attitudes. The Production Tax Credit has already expired and the Investment Tax Credit is set to decline or expire at the end of 2016.

Currently, the biopower market is hamstrung by a combination of policy uncertainty and biomass feedstock costs relative to fossil fuels – *"Biopower's potential will also be linked to the ability of national governments to implement carbon regulations, carbon trading, renewable* 

How do	you think your utilit	ty's fuel mix will ch	ange over the next 2	20 years?
	Stay the same	Increase	Decrease	N/A
Natural Gas	14%	74%	7%	5%
Wind	17%	72%	4%	7%
Utility-scale solar	12%	79%	2%	8%
Hydro	62%	15%	8%	15%
Coal	9%	3%	77%	35%
Nuclear	35%	16%	21%	27%
Oil	17%	3%	45%	11%
Distributed energy resources	5%	84%	2%	9%

*portfolio standards, and other economic incentives.*<sup>"219</sup> There generally are four key drivers or determinants affecting the broader uptake of biomass sourced electrical generation including:

- Relative price of incumbent fossil fuels: Feedstock costs typically account for 20% to 50% of the levelized cost of electricity (LCOE) of a biomass plant, putting biopower at a disadvantage against low-cost coal and natural gas-fueled power plants.
- Cost and quality of the resource: Biomass feedstocks are very heterogeneous and scattered, making biopower viable typically within a 50-mile radius.
- Efficiency of the conversion technology A myriad of technologies are relevant to the conversion of biomass into power. Breakthroughs and cost reductions in gasification, for example, could lead to an increase in biopower deployment.
- Public policy: Biopower remains a highly subsidized market globally and any scaling back or increase in incentives can have a dramatic impact on the project financing and the rate of deployment.<sup>220</sup>

<sup>&</sup>lt;sup>218</sup> Fuel: Electricity Generation – Plans for 2015, oilandgas360.com, citing Energy Information Administration

<sup>&</sup>lt;sup>219</sup> Biopower Markets and Technologies, Renewable Power Generation from Biomass in Dedicated, Co-fired, and CHP facilities: Feedstock Outlook, Market Opportunities, and Forecasts, Pike Research (now Navigant Research), Published 1Q 2012

<sup>&</sup>lt;sup>220</sup> Market Data: Biomass Power Generation, Electricity Generation from Biomass: Installed Capacity Forecasts for Dedicated, Co-Fired, Anaerobic Digestion, and Biorefinery Facilities, Navigant Research, Publishied 2Q 2013

The solid biomass market saw an uptick in project development between 2010 and 2013 across the United States, but growth is expected to slow through 2020, and likely beyond. A significant influencing factor in the growth was attributed to speculation around the demand for the volume of biomass and other renewable forms of energy from various utilities in response to various statewide RPS.<sup>221</sup> It



has been noted that there has been a limited recent appetite for solid biomass projects from a project financing standpoint, and greater scrutiny around the siting and permitting for renewable projects. Between 0.5% to 2.5% estimated compound annual growth in installed biomass capacity is expected between 2013 and 2020, with a significant portion of that expected in the Southeastern part of the U.S. due to access to concentrated sources of wood feedstocks.<sup>222</sup>

8. Impact of the GREC PPA on GRU's Financial Condition and Rates

In its Biomass Plant Risk Assessment Summary, GRU estimated the potential impact to GRU customers (i.e., based on an average 1,000 kWh residential bill per month) at \$10.56/month in 2014 before potential offsetting adjustments, and \$5.12/month in 2019.<sup>223</sup> However, both of these numbers were presented with the potential to significantly offset such cost increases based on various potential savings including reducing the 2014 potential impact to almost nothing, and driving a benefit to GRU customers in 2019 by approximately \$5.03/month. In addition, these

estimates assume that 50 MW of the output would be sold to a third party on a wholesale basis.

However, GRU lacked a structured risk management assessment and mitigation program

	20	)14	2019		
Parameter	Item	Cumulative Effect on Bill	Item	Cumulative Effect on Bill	
Direct Utility Bill Cash Flows	100000		Contract of		
Net Effect After Fuel Savings	\$10.56	\$10.56	\$5.12	\$5.12	
Effect of Prepayment Restructure	-\$2.25	\$8.31	-\$2.27	\$2.85	
CO <sub>2</sub> Regulation savings @ \$12/MWH	-\$2.22	\$6.10	-\$2.10	\$0.75	
Indirect Utility Bill Benefits		10.042			
Avoided capacity in 2023	-\$4.73	\$1.37	-\$4.49	-\$3.75	
Other Community Benefits From Off-System Sales					
Prop Tax Revenue for County, Schools, Library	-\$1.35	\$0.02	-\$1.28	-\$5.03	
Other Regulatory Risk From Delay					
Missing ITC Grant Deadline 1/1/2014	\$1.48	\$1.50	\$1.40	-\$3.62	
PTC Not Extended	\$3.14	\$4.63	\$3.29	-\$0.34	

<sup>&</sup>lt;sup>221</sup> Navigant Research

<sup>222</sup> Ibid

<sup>223</sup> Contract for Biomass-Fueled Generation, Presentation to the Gainesville City Commission, May 7, 2009

during this time period and many of the identified potential offsets were little more than 'best-guesses" at the time with limited support until further evaluation and analyses could be pursued.

a) GRU's Electric Rates have Increased Significantly Since 2005

GRU's electric rates have increased steadily, and significantly, since 2005, which has been an issue of increasing concern to various citizens and critics of the GREC PPA. As has been noted in various GRU presentations to the City Commission, GRU's relative competitive position in providing electric service has changed significantly from being one of the lowest cost providers in 2001 to one of the highest cost providers in 2014. The significant change in GRU's comparative position is displayed in the charts below.

The change in GRU's comparative position has resulted from a number of significant rate increases that occurred ratably during the period 2001 to 2008, and again during the period 2013 - 2014. The respective average rate increases by year since 2005 are reflected in the table below:<sup>224</sup>

System	2006	2007	2008	2009	2010	2011	2012	2013
Electric	14%	10.8%	7%	6.9%	2.25%	1.7%	-	(5.6)%
Water	25%*	13%	9%	4.5%	7.7%	8.41%	3.5%	3.85%
Wastewater		17%	10%	2.25%	3.5%	4.40%	3%	5.25%
Gas	-	11%	19%	-	2.25%	-	-	.85%
* Inclusive of	revenue require	ement for both	n the Water an	ıd Wastewater	systems			

However, in comparison to other utilities in Florida, what is apparent is that electric rates have increased across the board for most utilities during the same time-period driven in part by increasing fuel costs, inflation and other factors. GRU's residential electric rates for an average 1,000 KWh customer in a given month in comparison to other utilities is depicted in the adjacent chart.



Upon closer inspection

however, while GRU's electric rates have increased over time, GRU's rates relative to the average increase in electric rates for select other comparable utilities, were very consistent with the average

<sup>&</sup>lt;sup>224</sup> Change in revenue requirements from the respective systems as reported in Gainesville Regional Utilities Annual Reports and Financial Statements for the Periods Ended September 2006 through September 2013

rate increases of other utilities during the 2001 – 2006 time period. It was not until 2006 / 2007 that GRU rates increased significantly relative to the increase observed for other electric utilities in Florida. And, while the average electric rate for Gainesville residential customers during the period 2007 – 2013 remained relatively constant (i.e., declining slightly during the period), the average electric rate for residential customers at other utilities experienced a much more significant decline in rates.

#### b) Electric Rates - Comparison to Other Regional Utilities

A limited analysis of GRU's electric rates for its residential customers during the period 2001 – 2014 was conducted to provide additional perspective in relation to various issues and questions addressed in this Report. Electric service bill comparison data was obtained from publicly available information from the FMPA for various providers of electric service including municipal electric utilities, investor owned utilities (IOUs), and electric cooperatives, all of which are located within the Florida Reliability Coordinating Council ("FRCC") area of the U.S. and the Eastern Interconnection. A summary of the average pricing for residential customers using 1,000 kWh during the period 2001 – 2014 is included in the chart below.





Based on the limited comparison to selected utilities provided in the table above, GRU's historical residential power cost per 1,000 kWh has increased from being one of the lower cost providers in 2001 to the highest cost provider in 2014. The graph below illustrates the differences in power pricing from year to year during the period 2001 – 2014.

In comparison to the average electric rates per 1,000 KWh of consumption for other electric utilities in Florida, average rates have generally increased across all utilities by 38% as compared to the 66% increase for GRU's electric customers. However, the comparative rate increase was much similar over the period from 2002 to 2009 where GRU's electric rates increased by approximately 72% to the average rate increase of approximately 55%. But,



where the average electric rate in Florida began to decrease in 2009, GRU's electric rate decreased at a slower rate, then increased significantly in 2014 in relation to the GREC PPA. In summary, while the GREC PPA had a significant impact on GRU's electric rates in 2014, GRU's rates had increased over time relative to the average, going from being approximately 4.60% lower in 2001 to 4.86% higher in 2013. This increase does not appear to have had any relation to purchase of biomass-fueled electric power under the GREC PPA, which did not begin until late 2013.

While the electric fees (i.e., per average 1,000 kWh of electricity consumed) being recovered by GRU have increased by over 66% since 2001, the increase in electric rates have generally increased across Florida and the United States.

Historical Rates	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Gainesville	\$84.04	\$76.90	\$82.58	\$85.45	\$92.25	\$103.70	\$107.08	\$126.56	\$132.06	\$129.83	\$127.88	\$127.67	\$126.21	\$139.40
												Percent C	hange	66%

Despite the concerns raised with regard to the GREC PPA, to date its overall impact to GRU's customers has not been substantial relative to other causal factors responsible for increase in GRU's electric system costs during the past ten-years. However, depending on future market trends, changes in customer demographics and electric usage, and the outcome of believed changes in legislative and regulatory framework affecting renewable energy, as well as potentially the long-term price of fossil fuels, the impact of the GREC PPA could become more pronounced.

#### VIII. City and GRU Internal Controls

#### A. Introduction

Despite lengthy efforts by GRU and the City to evaluate their long-term energy supply needs and to put the necessary contract solicitation, negotiation and management framework in place to provide assurances to the City Commission and GRU's customers, significant cost increases in the GREC PPA, as well as increased risk, were the result of many challenges faced by complex contract negotiations...including failures in project management and governance.

As part of the scope of work, Navigant was requested to review the existing policies, procedures and internal controls that exist both at the City and at thGRU, especially as they relate to delegated authority, decision-making and the overall purchasing function within GRU. In addition, our scope of services was structured to provide recommendations, as applicable, for institutional controls that could be implemented by GRU and / or the City to avoid the expressed concerns and "management discrepancies of the past to help strengthen the working relation between GRU management and the City Commission."<sup>225</sup>

The following sections describe the scope of the work performed during the Investigative Review, our assessment of existing policies, procedures and internal controls, and key observations and findings including recommendations with regard to the existing governance structure.

#### B. Summary of Work and Objectives

Problematic contract negotiations and contract administration are the result of various risks inherent in the negotiation of long-term power supply contracts. However, shortcomings and deficiencies in management and governance, as well as the failure to adequately identify, properly allocate, assess and either optimize or mitigate key risks are often to blame.

The existence of appropriate safeguards was a demonstrated concern for the City Commission. During the RFP process, the City requested "binding" proposals from the three highest-ranked bidders. In addition, at the beginning of the contract negotiation process, the City Commission requested a termination for convenience or "back-out clause," as well as assurance that certain other key risks were being addressed.

Navigant's efforts were directed, in part, at evaluating whether the City and GRU established and maintained an effective governance and management structure with regard to the solicitation, negotiation and administration of the PPA, and whether there are identified deficiencies or gaps in the policies, procedures and controls that potentially were exploited during the period subject to the Investigative Review, including:

 Whether a clear and well supported governance and management framework between the City and GRU existed during the relevant period including appropriate delegation of

<sup>&</sup>lt;sup>225</sup> City of Gainesville, Request for Proposal RFP No. CAUD140037-DH, External Investigative Review of Gainesville Regional Utilities, Issue Date: April 10, 2014

authority, policies and procedures with regard to the purchasing function, and communication;

- Whether the personnel involved had an appropriate level of skills and were supported by the proper tools;
- Whether the City / GRU's governance and management framework was applied consistently throughout the period under review;
- How deficiencies in the governance and management framework were identified and addressed; and
- Whether the City / GRU's governance and management framework adheres to leading best practices.

Navigant evaluated each of the areas described above through the collection and analysis of information from a number of sources including:

- Review of open meeting transcripts of discussions, as well as orders by the City Commission, in relation to the development of the RFP, the contract negotiation process, and the proposed schedule and timing.
- Review and evaluation of the City Charter, as well as the relative roles of the respective personnel in that process.
- Review and analysis of presentations, reports and analyses prepared by GRU in relation to the GREC PPA.
- Review of applicable City and GRU policies and procedures, and the general policies and procedures of best-performing utilities.
- Review of GREC related information and presentations to the City Commission, City and County of Alachua, and to the public.
- Review of select emails regarding City / GRU program governance and management controls.

Navigant also reviewed a number of documents that provide the framework under which the City manages its governance, policies, procedures and practices, both for the City in general, and specifically for GRU, including:

Charter for the City of Gainesville

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- Code of Ordinances for the City of Gainesville
- State of Florida Administrative Code, Chapter 27–Utilities
- Florida Public Service Commission, Chapter 366, Public Utilities
- Florida Statutes, Chapter 286, Sunshine Law
- City of Gainesville, Purchasing Policy Resolution 060732, Passed December 11, 2006
- Gainesville Regional Utilities, Utilities Purchasing Procedures Manual
- City of Gainesville, Financial Services Procedures Manual

Navigant compared the existing City / GRU structure and relevant requirements to best practices among other municipal and publicly owned utilities, as well as other governmental agencies to identify opportunities for improvement. In addition to Navigant's experience working with

publicly owned utilities, our efforts benefitted from other work focused on the governance framework for municipally owned utilities including the following:

- A Gainesville Solution, The Energy Competitiveness Report, prepared by the Gainesville Area Chamber of Commerce, November 2013
- Survey of Municipally Owned Electric Utilities (MOUs) in Texas, Payments and Contributions to Local Governments, Utility Governance, prepared by the Texas Public Power Association (TPPA), April/May 2012
- Governance Study of Public Power Utilities for the City of Austin, prepared by Bob Kahn, LLC, Energy Consultants, August 27, 2012
- 2010 Governance Survey by the American Public Power Association (APPA), published August 2010
- Managing Public Utilities: Lessons from Florida, Nuno Ferreira da Cruz, Sanford V. Berg, Rui Cunha Marques (2011/2012)
- Handbook for Public Power Policymakers by the APPA, published 2003

In addition, Navigant conducted interviews with over thirty-five (35) individuals during the course of our work to ensure a full understanding of the chronology of events relating to the GREC PPA's development and an appreciation of the roles and responsibilities of key individuals and groups involved in the program management and governance processes.

#### C. Summary Findings and Observations

Based upon the review performed, Navigant observed the following:

- The City Commission reasonably relied on GRU Senior Management for adequate information regarding the GREC PPA. As is often the case with elected officials, the attention of the City Commission suffers from the competing demands in relation to the day-to-day operational and public issues that face a large city government and municipality like Gainesville. However, although it was the responsibility of GRU Senior Management to ensure that accurate and adequate information was being provided to the City Commission, it was equally incumbent upon the City Commission to ensure they were receiving adequate information, to ask appropriate questions, and to seek additional information where warranted to provide the necessary foundation for effective decision-making.
- The City Charter provides extensive authority the General Manager for Utilities while
  placing restrictions on the City Commission related to the Utility System matters.
  While broad, Navigant believes the current provisions yield more benefits to a municipal
  utility and city like GRU and Gainesville, and that the concerns related to the GREC PPA
  were principally due to poor governance and communication, rather than the level of
  authority granted to the General Manager.
- GRU Purchasing policies are consistent with the City Purchasing Policy and comprehensive in scope and content. However, Navigant is recommending certain modifications when dealing with complex contract negotiations with vendors.

The City Commission has authority to provide for governance of GRU. The City Commission should consider revising its governance structure through the creation of an independent Board. In recent sessions of the Florida Legislature, a bill has been submitted to create an independent board to provide oversight of GRU, severing this responsibility from the City Commission, except as it relates to the issuance of bonds and approving rates.

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- The City might consider revising its governance structure through a more robust use of the Gainesville Electric Advisory Committee (GEAC). Because creation of an independent Board may require a charter amendment and a voter referendum, as a stop-gap or interim measure, the GEAC's roles and responsibilities could be enhanced to allow for a more transparent and in-depth review of GRU matters.
- The City Commission is subject to Florida Sunshine Law provisions. While these provisions are not applicable to private entities such as GREC, its existence and applicability to the City Commission and its subcommittees creates the challenge of keeping certain proprietary information of the private company confidential during negotiations.
- GRU is subject to both City policies, as well as specific policies, procedures and controls developed for GRU. However, while these policies and procedures are generally sound, they are not always consistently followed.
- Throughout the contract negotiation and management process, there appears to have been ineffective communication between GRU and the City Commission. The communication process between the City and GRU, an important control function, included both formal and informal meetings regarding the status of the GREC PPA. However, overall the City Commission appears to have had poor visibility into the actual status of the contract and contract negotiations, as well as subsequent changes and amendments that occurred during the permitting and construction of the biomass fueled facility.
- GRU failed to appropriately consider and monitor key risks associated with the GREC PPA. Despite GRU's apparent awareness of the various challenges and risks inherent to the GREC PPA, they still failed to appropriately monitor, manage and mitigate the effects of many of the key risks inherent to a project of GREC's size and complexity...the combination of which had a direct impact on the significant cost increases and added risk to the City.
- External assistance retained by the City may have resulted in a different outcome. Although it is not uncommon for governing bodies to retain outside assistance to provide additional visibility and control, the City does not appear to have had any independent outside party involved in the process that could have provided greater information regarding the specific risks existing within the contract, and how those risks were being addressed and /or mitigated.
- Involvement of the City's Internal Audit in the negotiation process would have better informed the City Commission. While the City's Internal Audit Department performed

various audits of GRU for compliance with specific policies and procedures, and related to the "change in law" issue, their role stopped short of evaluating the GREC PPA, and whether the terms of the PPA were being negotiated or administered in accordance with the provisions requested and approved by the City Commission.

In hindsight, while the City and GRU had effective policies and procedures, and an internal control environment, limitations in the risk assessment and analysis of potential impacts to ratepayers, and poor communication and deficiencies in governance and management oversight resulted in a lack of accountability that contributed to increased contract costs and risks to the City and GRU's customers.

The investigative team recognizes that both GRU and the City Commission are already addressing some of these issues and that the City and GRU are in the process of a governance transition, including a significant change in management. We understand that GRU has adopted certain new governance policies, which we believe were necessary and prudent steps. The newly adopted steps, current issues facing the City and GRU, and Navigant's observations and recommendations in connection with these issues, is further discussed below.

#### D. Evaluation, Analysis and Observations

It is well-recognized that one of the critical factors that influence the success of any organization is the existence of both effective governance and management, and the policies, procedures and controls to ensure that a governing body's strategic objectives are being followed and met. Likewise, critical challenges facing an organization and its decision-making (e.g., acquisitions/ divestitures, major contracts, corporate expansion/contraction, leadership changes, etc.) require attention from the governance, as well as, the management level. Often, failures occur when the governing body fails to place significant focus on whether sufficient safeguards are in place to ensure the efficient and effective management of the organization.

Based on Navigant's review of policies, procedures and internal controls that define and distinguish the relevant governance and management practices between the City and GRU, Navigant suggests a number of governance-related recommendations to improve the effectiveness and oversight of GRU. While certain recommendations are in response to the deficiencies outlined in this section of the Report, others address potential additional areas for improvement with respect to other issues evaluated during the course of the Investigative Review that are described elsewhere in this Report. Navigant's observations and recommendations include the following:

1. The City Commission Relied on GRU Management (General Manager)

GRU and the City are governed by the City Commission comprised of seven members. The primary responsibility of the City Commission is to manage the affairs of the City and ensure that GRU maintains reliability and operates in a fair, efficient and non-discriminatory manner. The City Commission is comprised of seven elected representatives, four from single-member districts, two elected at-large, and the mayor.

The City Commission selects GRU's General Manager, sets overall goals and policy direction, has approval powers over GRU's budget and rates, and is responsible for overseeing GRU's operations in such a manner as to assure effective and sound management. As such, the City Commission essentially acts as the "regulator" of GRU, similar to the role that the Florida Public Service Commission plays with respect to investor-owned utilities in the State.

Throughout the PPA solicitation and negotiation process, the City Commission also had the fundamental role in setting the tone for GRU's management in relation to the desire for a biomass-fueled energy supply including the relative importance it placed on ensuring the successful execution of a long-term PPA and ultimate launch of the facility.

The effectiveness of the City Commission's oversight responsibility is dependent on various factors including the adequacy of the information it receives, the experience and extent of their involvement, the City Commission's scrutiny of management's actions and decision-making, as well as the appropriateness of those actions, and the willingness of the City Commission to address difficult and sensitive questions and issues with management in an open forum.

The City Commission, as is typical with many municipal governing bodies, as well as Boards of Directors for that matter, has very little day-to-day interaction with the operations of GRU. Throughout the PPA negotiation and execution process, some City Commissioners appear to have received very limited briefings in individual meetings with GRU Senior Management. However, the attention of the City Commission suffers from the competing demands in relation to the day-to-day operational and public issues that face a large city government and municipality like Gainesville.

As such, it was incumbent upon GRU Senior Management to ensure that accurate and adequate information was being provided to the City Commission to keep them informed of the ongoing risks and potential challenges to the GREC PPA. In addition, it was incumbent upon the City Commission to ensure that they were receiving adequate information, to ask appropriate questions and to seek additional information where warranted to provide the necessary foundation for effective decision-making.

2. The City Charter Provides Extensive Authority to the General Manager

The General Manager of Utilities (GM) is a Charter Officer and, as such, reports directly to the City Commission. Mr. Hunzinger was the General Manager for Utilities beginning in March 2008 until his departure in November 2013. An interim General Manager (Kathy Viehe) was appointed in November 2013 while the City conducts a national search for a General Manager, which commenced in October 2014.

In summary, the General Manager "shall be responsible for and have exclusive management jurisdiction and control over operating and financial affairs of the Utility System, including but not limited to..."<sup>226</sup> The City Charter provides extensive authority to the General Manager for Utilities while placing certain restrictions on the City Commission related to Utility System matters. More

<sup>&</sup>lt;sup>226</sup> Section 3.06 (2) of the City Charter

specifically, as it related to the PPA, the charter further states that the General Manager for Utilities "Shall be the purchasing agent for all equipment, materials, supplies and services necessary for operating and maintaining the Utility System subject to the policies promulgated by the Commission."<sup>227</sup>

The importance of this is established when compared to the responsibilities of the City Manager, whose responsibilities section includes similar language.

The City Manager: "*is the purchasing agent for the City subject to rules adopted by the Commission. However, power of purchase and sale granted to the City Manager does not include the power to dispose of any public utility owned by the City.*"<sup>228</sup>

The Charter provides that while the GM works for the City at the will of the City Commission and is required to follow City policies, the City Commission has certain restrictions placed on it within the Charter as it relates to interaction with the GM. First among those has to do with interference with charter officers and is stated as follows:

"Neither the Commission nor any Commissioner, including the mayor, may dictate the appointment of any person to office or employment by the charter officers nor in any manner interfere with the independence of charter officers in the performance of their duties..."<sup>229</sup>

Additionally, the City Commission is restricted in its ability to dispose of utilities without the vote of the citizens.

"The Commission may not, in any manner, dispose of or agree to dispose of the City's electric or water production or distribution facilities or any part thereof so as to materially reduce the capacity of the City to produce or distribute electric energy or water, unless the Commission does so by ordinance with prior approval of a majority vote of the qualified electors of the City voting at an elections for the purpose of approving the ordinance."<sup>230</sup>

From a general perspective for most municipally-owned utilities, this level of authority for the GM is significantly greater than the level of authority granted within most other municipally-owned utilities. In many cases, the electric utility (or a combined electric, water, wastewater utility) is just one city department and many of its functions such as purchasing, personnel administration, and other functions are performed by other city departments on behalf of the electric department, with the electric or utility department reporting to a City Manager or Assistant City Manager.

However, Navigant finds that such an organizational relationship in other cities is not only inefficient, but also puts organizations that are supposed to be cooperating to achieve goals in conflict because their purposes, goals, and skill requirements are different. In Navigant's view, the current level of authority provides for significant opportunities for efficiencies and latitude in

<sup>&</sup>lt;sup>227</sup> Section 3.06 (2) (c) of the City Charter

<sup>&</sup>lt;sup>228</sup> Section 3.02 (2) (i) of the City Charter

<sup>229</sup> Section 2.10 of the City Charter

<sup>&</sup>lt;sup>230</sup> Section 5.04 of the City Charter

meeting the utility customers' needs, but also necessitates a greater level of governance and communication between the General Manager and the City Commission.

Navigant does not recommend any changes to the City Charter provisions related to authority of the General Manager for Utilities. As discussed, the authority granted to the General Manager for Utilities allows the General Manager to effectively run the organization without the political, operational and financial overhead and other burdens typically experienced by utilities that are treated as a department of the city. Effective governance requires not only a committed governing body and comprehensive internal controls, but strong Senior Management. The most effective governance (and management) occurs between a strong governing body and strong General Manager with appropriate qualifications, a willingness to take a stance on critical issues and make hard decisions, and an understanding of the obligations to communicate openly, including taking the time to educate, when needed, on why issues are important.

Based on interviews and a review of e-mails and other notes, with regard to pursuit of a biomasssourced energy supply and the GREC PPA negotiations, it would appear that the City Commission was so intent on its commitment to renewables, and in particular biomass, that the line between effective governance and management may have become blurred. Provided below are some examples :

- <u>Opposition to GM for Utilities' Plans for an additional coal unit</u>. This issue first started with the fact that the City Commission, with the Mayor leading the effort, supported a commitment to biomass and the rejection of the plans proposed by the then General Manager involving coal or other generation resources. As a result, although not publicly stated, the former General Manager took advantage of his severance/retirement package opportunity and resigned.
- A failed attempt to hire a GM and appointment of an Interim General Manager for Utilities From the time of the departure of the previous GM until such time as GRU began the process of both securing a permanent GM and began the acquisition of a renewables/biomass resource supply, an Interim GM was appointed. No suitable replacement for the GM was found in an initial effort, but GRU continued with the process of issuing an RFI, and then an RFP for a PPA to be provided from a biomass plant. The Assistant GM of Strategic Planning led this effort internally at GRU. The effort to identify a suitable GM failed with the issue of the biomass plant given as a specific reason cited by the top candidate withdrawing his name from consideration. For the second top candidate, an adequate compensation package could not be negotiated. At that time, the City Commission decided to stay with the Interim GM.
- <u>Hiring of a new GM to negotiate and execute a biomass based PPA</u> In 2007,the City Commission went through a process of identifying new candidates for the GM position, requesting that a list of seven (7) candidates be identified. This is an unusually large pool of candidates for such a high-level position. After interviewing several of the candidates, one candidate was selected to take on the responsibility as the new GM. While the candidate had experience negotiating contracts for the construction of new power plants, and had

been involved in contract disputes related to purchased power, the candidate had no previous general manager experience, nor experience in negotiating a PPA as complex as this would turn out to be. It is suspected that he was selected because of his willingness to support negotiation and execution of the PPA. By the time that this candidate was hired, GRU was already in the process of selecting their top rated firm with which to negotiate a biomass based PPA.

Emphasis on getting a contract negotiated and executed – The effort of selecting a provider with whom to negotiate the contract was performed in early 2008. During the period of GM selection, and the concurrent process of selecting a preferred PPA provider, these efforts were led by the Assistant GM for Strategic Planning. With the new GM onboard, in April 2008 the City Commission authorized the GM to negotiate and execute a PPA with the preferred vendor. From that point forward, the focus of the negotiation team was on getting a PPA negotiated and executed. The shortcomings in that process are discussed in more detail in Section VI, but interviews with individuals involved in the process indicate that the entire focus was on getting the deal done. Typical due diligence activities such as verifying assumptions such as natural gas prices, competitiveness of the costs, or the impact on ratepayers' bills were not done. Or if done, the adverse impact on rates was justified by placing the most positive spin on the impact, with little focus on the incorrect assumptions used by GRU.. At one point, even the Assistant GM expressed concern about the cost of the PPA, but such concerns were not shared with the City Commission.

Navigant believes that if the GM had taken all of the facts back to the City Commission, including the level of risk inherent to the GREC PPA and its potential impact on customer electric rates, the City Commission may have had adequate information to question the wisdom of entering into such a burdensome PPA. Strong leadership from the GM, and clear communication about the impact of the PPA may have averted the City and GRU from being in its current situation. At a minimum, such information may have reduced the surprise associated with the impact of the PPA on GRU's electric rates and the public outcry that ensued.

3. GRU Purchasing Policies are Consistent with the City Policies

GRU purchasing policies are consistent with the City purchasing policy and generally comprehensive in scope and content. GRU's control structure is based on a framework of policies and procedures that includes corporate policies, operating procedures, and other documents. Many of the applicable policies and procedures were implemented over the course of many years. However, following a review of the City purchasing policies and practices by the City Auditor in late 2005, and early 2006, the City Commission adopted a new Purchasing Policy through Resolution #060732 in December 2006.

In general, a *financial control* element should address overall controls associated with the financial management of GRU including those relating to procurement, contracting, expenditures, invoice approval, delegation of authority, and the handling of exceptions.

The Policy adopted by the City is applicable to all purchases by the City and are required to be implemented by the City Manager or the General Manager for Utilities. As would be expected, we

observed many of the standard financial control elements with the City's Purchasing Policy including certain thresholds requiring approval by the City Commission, which is set at \$50,000. There are some exceptions for which this threshold does not apply. The most relevant exceptions include:

- Any adjustment to a contract or purchase order previously approved by the City Commission which does not affect the cost....or which constitutes an addition to the purchase amount of ten (10%) percent or less of the previously approved amount; and
- Purchases of fuel used in operating plants and equipment.

Missing from this listing is any reference to purchased power agreements or power purchased in the wholesale markets of Florida. As such, the size and complexity of these types of agreements (for fuel and purchased power) may not have been anticipated, and therefore not addressed in the policies. Navigant suspects that the exceptions provided within the purchasing policy were based upon the fact that fuel purchases require a special knowledge available only at GRU, and similarly procurement and sales of power to and from other utilities in Florida represents a day-to-day activity that requires such special knowledge and capabilities, available only at GRU.

In addition, the Policy states that approval of the City Attorney shall be obtained on all written contracts, except for standard contracts. However, such approval would not appear to apply to fuel and purchased power agreements.

A review of the GRU Purchasing Procedures Manual determined that the Purchasing Manual is consistent with the City's approved Purchasing Policy Resolution. The applicable rules concerning thresholds for City Commission approval are clearly defined, and the processes for seeking bids and making purchases are clearly laid out. There are provisions within the GRU Procedures for obtaining City Commission approval when required, and a section that discusses modification of contracts. However, that section focuses on contracts that need to be modified, not on the process of agreeing upon an initial contract, and certainly not one as complex as the PPA.

As far as the issuance of the RFI and RFP for the biomass PPA, it would appear that all of the policies and procedures were followed up to the point of approval by the City Commission for the GM to negotiate a contract for the biomass plant with Nacogdoches Power. Once the evaluation of the responses to the RFP began, the GRU Purchasing Division was no longer involved, nor was anyone from the GRU financial organization significantly involved. In general, a procurement is not considered complete until the ultimate contract has been executed. Comments on the process for contract negotiation and execution are addressed in more detail in Section VI of this report.

However, while the City and GRU purchasing policies and procedures appear to be adequate and were followed up to the point that complex contract negotiations began between GRU and GREC, to further strengthen controls, the City and GRU should consider making the following modifications when dealing with a complex contract that requires negotiation with a selected vendor.

- Authorize the GM to only negotiate a contract with a selected vendor, and require that the
  negotiated contract be brought back to the City Commission for approval before it is
  executed by the GM.
- Require that the City Attorney's approval of a complex contract be required before it is executed by the GM.
- Require that the GM provide updates to the City Commission if there are issues that arise during the negotiation, or as in the case of this PPA, between the time the City Commission approves a contract, and the time that the contract becomes effective.
- Record all contract negotiation sessions with a selected vendor. This will not only provide a record of what was discussed and negotiated, but also satisfy open records requirements, once the contract has been negotiated.

In addition, Navigant has observed the existence of several other corporate policies that often can provide more instructive controls over the purchasing function and recommend that the City evaluate the applicability of such controls to its existing policy framework.

- Delegation of Authority establishes delegated signature authority for signing contracts, authorizing purchases, authorizing projects and approving disbursement of funds for goods or services.
- *Competitive Bidding Procurement* outlines standards associated with vendor sourcing and qualification, competitive pricing, purchase orders, vendor contracts and vendor assessments, among others.
- *Contract Approval Forms* to authorize the acquisition of goods or services, and which
  include relevant information related to the good or service including service descriptions,
  contract start and end dates, estimated hours and rates, and not-to-exceed amounts, as well
  as the required approval signatures of the designated individuals.
  - 4. GRU Management and the City Lacked Effective Oversight of the Control Function

In a typical organization, management and employees are delegated appropriate levels of authority and responsibility over their departments or functional areas, as well as authority to facilitate effective controls within those areas. The degree of delegation is also dependent on the employee's experience, knowledge, and competence in his or her area.

In larger organizations, the responsibility for implementing and monitoring internal controls typically falls to the CFO and/or the Controller, who is responsible for internal controls over the organization's financial reporting, and to a General Counsel, who is typically responsible for internal controls over the organization's effective compliance with laws and regulations.

However, while GRU personnel were significantly involved in the contract negotiation and execution process, the GRU CFO had limited to no involvement, or responsibility for, the financial evaluation or management of the GREC PPA. The financial and risk assessment, as well as reporting to the City Commission, was done through a small team of individuals, rather than (or at least with involvement from) GRU's Finance and Accounting Department. This further

encumbered the visibility and transparency of the GREC PPA to the City and City Commission. While the applicable City and GRU controls were still in place, the limited oversight by GRU's Finance and Accounting Department effectively removed an additional layer of control and accountability that may have resulted in a more effective assessment of the contract risks, the ultimate contract costs, and the cost to GRU's customers.

5. GRU Management Failed to Effectively Communicate the Contract Status

The internal control framework established by the City and GRU is generally sound. However, at times the GRU General Manager does not appear to have effectively utilized, evaluated, or communicated pertinent information to the City Commission. In addition, at times, as with the Equitable Adjustment for Change of Law, there appears to have been limited evaluation of the reasonableness of the costs or whether the costs were aligned with the respective project and City Commission objectives.

Many governance problems have arisen from poor management decisions, hidden and often compounded through inadequate information disclosure. In addition, if reliance is too heavily placed on management reports, or individual communications, there is a risk that information may be incomplete, filtered, or edited, even if in good faith...a process (called "asymmetric information") that appears to have happened in communications between GRU Senior Management and the City Commission.

Throughout the contract negotiation and management process, there appears to have been ineffective communication between GRU and the City Commission. The information communicated in open meetings before the City Commission often lacked sufficient detail, or debate, as well as certain critical information, and appears to have varied in content with regard to individual meetings between GRU personnel (typically Messrs. Hunzinger or Regan) and individual Commissioners. In reality, the City Commission was ill-equipped to assess the key risks associated with the GREC PPA, the status of the contract negotiation, or the actual risks as the facility was being constructed.

Without effective City Commission oversight, there was limited transparency and accountability into the status of the contract negotiation during 2008 and early 2009, or during subsequent amendments to the contract from 2009 into early 2011. As a result, the City Commission appears to have often lacked sufficient information relative to the assessed risks, as well as the potential cost impact from potential changes and actual changes to the contract, as well as the ability to effectively question or challenge the information provided to them.

In fairness, GRU embarked on an effort to scrub the existing cost proposal from GREC to identify areas of potential cost savings to offset the significant increases anticipated in connection with costs of construction. However, GRU's effort appeared to be based more on varying certain assumptions and estimates (many of which were unlikely) rather than on definitive avenues to adjust or eliminate some other aspect of the potential costs. In other words, a substantive portion of the cost-saving effort appeared to be primarily a re-shuffling of assumptions that do not appear to have been supported by any significant analysis. In effect, GRU management appeared to be looking for ways to mask the cost increases without really addressing the significant cost pressures the contract

was under at this point. In essence, GRU appears to have been simply managing to construction start date (and planned completion date) to ensure the project's eligibility for certain government incentives...all without the benefit of GRU's CFO or the Finance and Accounting Department.

While we believe that certain information may have been known, or at least available, to the City Commission, and potentially to individual members of the City Commission, at times there were significant inconsistencies between what information was known by GRU and what was ultimately communicated in presentations to the City Commission and the public.

Had more detailed information been available to both the City Commission and the public during this period, including trend analysis of projected costs and purchased power under the PPA, it would have been more apparent that the economics of the GREC PPA were escalating with large potential ramifications to GRU and its customers. In addition, had a comprehensive risk assessment and risk management plan been available, it would have been apparent that many of the key assumptions cited in support of the GREC PPA were no longer valid, or at least not attainable within the foreseeable future.

In retrospect, ample evidence existed of the significant challenges and costs facing the successful development and launch of a biomass-fueled energy supply for the City, far in advance of the concerns expressed since GREC became operational, and the relative impact of its cost to the utility and its customers became apparent. Unfortunately, the information communicated to the City Commission was often too high level to provide the basis for any significant discussion regarding the risks and challenges that existed in the program at various points in time. In addition, the information communicated was often oversimplified, and carefully managed through individual meetings with Commissioners, and portrayed GREC and the GREC PPA in the best possible light.

Ultimately, despite various avenues of information available to the City Commission, each had failings in providing the City Commission with adequate information for informed decisionmaking around the significant challenges facing the GREC project. Regardless, the City Commission still had the responsibility to insist upon additional information and clarification when inconsistencies or concerns existed, especially in light of the growing sentiments and concerns expressed by certain GRU customers.

During the contract negotiation and GREC permitting and construction phase, the City Commission did not utilize independent reviews and / or audits by the City's Internal Audit Department. While the focus of Navigant's efforts were not directed at evaluating the sufficiency of the City's internal audits, or its effective use of outside resources, the City's Internal Audit Department and outside advisors could have been utilized to provide better visibility into the status of the PPA solicitation, negotiation and execution process to ensure that risks were being properly identified and discussed.

 Independent Review – Third-party experts or advisors could have been utilized by the City Commission to evaluate the biomass related proposals, the process of identifying and assessing critical risk areas, and the overall status and changes in the proposed terms of the contract. It is recommended that the City Commission be more proactive in its use of thirdparty advisors, who could do more to enhance their role as a source and conduit for

expertise, and if they believe that outside advisors could improve the quality of their decision-making.

- Internal Audit Department Adherence to City and GRU policies, procedures and controls is typically audited by the City's Internal Audit Department. However, the role of the City's Internal Audit Department, while an important component of the GRU internal control framework, appears to have been underutilized in ensuring adequate visibility into the status of the GREC project or contract, or that risks were being properly identified and mitigated.
- Steering Committee In large, complex projects, it is common for an entity to create a quasi "Steering Committee" to interface with the entity's governing body, and to provide broad executive oversight. A key responsibility of a Steering Committee is to review overall project status, performance, budget expenditures and forecast, and to ensure key stakeholders are aligned and have a common understanding of the projects challenges and progress. In addition, a Steering Committee may have a number of other responsibilities including reviewing and approving recommended changes, ensuring the efficient allocation of resources, organizational readiness, and resolving significant issues, risks and / or critical roadblocks,
- Re-Design Information Provided to City Commission The City Commission and / or City staff should periodically review the reporting format and content of information received by GRU, and ensure that the information is adequately keeping the City Commission informed of all topics relevant to the GRU's financial condition and overall sound management. In conjunction with new management, it is recommended that the City Commission use this as an opportunity to refresh the format and content of information it receives, which should also include a concise report on the key risks facing GRU and its customers.
- Foster Open Discussion and Debate While an open meeting format can sometimes discourage open discussion and debate regarding complex and / or controversial issues, it is incumbent upon the City Commission to foster open, and even free-ranging, discussions when benefits of disagreement and dissent may lead to achieving better decisions.
  - 6. GRU Failed to Effectively Evaluate and Manage Risk in the GREC Contract

The tone established by Senior Management in running a project often emphasizes internal controls in many respects. However, successful project management depends not only on strict adherence to internal controls, but on the effective management of the performance of the project and the project's ability to effectively identify, manage and mitigate many of the key risks it will face.

"Boards only know what the CEO and CFO tell them. Nothing more. This is a significant problem." Richard Beattie, Chairman, Simpson, Thacher and Bartlett LLP

In many respects, while GRU acknowledged the existence of certain risks, they often failed to effectively evaluate the potentiality of the risks, and their potential impact. Throughout our

evaluation, we noticed a lack of questioning, or presentations, around "How will this decision affect GRU and its customers long-term?"

The objective of a *Risk Management Operating Procedure* is to "identify potential risks, document mitigation strategies and monitor those risks and take action as needed" (i.e., to manage all risks that could potentially impact the budgeted cost, schedule, scope or performance of the project).

Risk Managemen	t Operating Procedure						
Objective:	Identify potential risks, document mitigation strategies, monitor risks and take action as needed.						
Elements:	<ul> <li><i>Risk Identification</i> – compile list of all risks affecting the project.</li> <li><i>Risk Analysis</i> – assess the probability and impact of each threat.</li> <li><i>Risk Management</i> – identify and document risk reduction activities and integrate into the project plan.</li> <li><i>Risk Monitoring &amp; Reporting</i> – execute assigned actions, progress reports by project managers and assessment of confidence in delivery.</li> </ul>	<section-header></section-header>					

A summary of a *Risk Management Operating Procedure* is provided below:

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As previously described, there are various risks inherent to the development and implementation of any long-term vendor relationship and contract. Having effective risk identification, analysis and management procedures is critical to maintaining control over performance of the contract, including project contract costs. Effective risk identification, analysis and monitoring could have focused more attention on the increasing levels of risk in the GREC contract negotiations as various contract provisions were changed, as risks shifted from GREC to GRU after selection, and as key assumptions cited in support of the project failed to materialize.

The City Commission has a responsibility in developing strategy, assessing risk, and overseeing risk management, and should act as an effective counterweight to excessive risk-taking by management with a careful eye on long-term impacts to the organization. Risk oversight was distilled down to a list of key questions by a commission brought together to evaluate risk governance by the National Association of Corporate Directors.<sup>231</sup> We believe that several of the key questions are pertinent to the City Commission including:

<sup>&</sup>lt;sup>231</sup> Report of the NACD (National Association of Corporate Directors) Blue Ribbon Commission on Risk Governance (Washington, DC, 2009

- Does the [City Commission] receive risk material that adequately distills vast quantities of risk information into prioritized summaries with proposed actions?
- Are the risks associated with business units presented to the [City Commission] in a comprehensive and holistic manner?
- What could go wrong or derail our strategy?
- What process was used to develop the strategy and identify risk?
- What assumptions underlie the strategy, and which of those assumptions could change or be wrong?
- Has management been forthcoming about differences among senior leadership regarding strategic recommendations and decisions?
- Does the [City Commission] have sufficient personnel (including advisors) and financial resources in place to enable it to fulfil its risk engagement responsibilities?
  - 7. The City Commission should Consider Revising its Governance Structure

The City Commission has a fundamental role in exercising oversight and responsibility related to the operations, financial reporting and overall internal controls of GRU to assure effective and sound management. As part of its governance role, a the City Commission's general function is to provide oversight, set strategy, and monitor the effectiveness of the utility's internal controls, while the General Manager is responsible for the day-to-day operations of the utility.

The issue of the appropriate board and governance structure for a municipal utility has been investigated by many different organizations including the American Public Power Association, independent entities like the Gainesville Area Chamber of Commerce, and for specific clients, even Navigant. There are many forms of governance available to Gainesville including the following:

- Direct Governance by the Commission or City Council (Gainesville's current state)
- Governance by the Commission or City Council with Support of an Advisory Council or Committee
- Governance by an Independent Board (Appointed by the Commission or City Council)

The expectations of good corporate governance have clearly changed over the past decade, and the risks are significantly greater for an organization and its governing body that fails to employ policies and procedures designed to safeguard the entity's assets. Entities of all types, including municipally owned utilities, have come under greater scrutiny to demonstrate their public accountability. However, many of the barriers identified in the APPA publication, Handbook for Public Power Policy Makers published in 2003 identified a number of barriers to effective governance by boards that still apply today. Among those are the following, many of which can be recognized as contributing to some of the issues that Navigant has identified in this Report. Those barriers include:

- Role Confusion—understanding the differences in the roles of the governing board and the role of the chief executive
- Ineffective Policy Setting—abrupt or frequent changes to the strategic goals of the utility
- Unproductive Relationship with the Executive—similar to role confusion in that there may
  exist a lack of trust of the Chief Executive, resulting in delving too far into everyday
  management of the utility
- Poor Communication—both among the members and with the Chief Executive, no effective way to have an open discussion, and either being provided too little or too much information
- Dominance—where the Chair, or any member of the board dominates discussions or decision making, other members are reluctant to ask questions, express opinions or ideas
- Conflicts while it is unreasonable to expect members to agree on every issue, their common goal must be to serving the best interest of the utility, its ratepayers, the city and its citizens. Once a vote is cast, the will of the majority must be supported by the whole board
- Ethical Problems—any real or perceived ethical problems or conflicts of interest will bring effective governance and work to a halt, or cause serious concerns among a community or other parties
- Poor Meeting Management—Because there are typically so many issues to be addressed, meetings must be well planned and balance the need for full participation with typically lengthy agenda that needs to be addressed

Based on Navigant interviews and observations, the first five items listed above may have existed during the period of time that the biomass decision was made, the RFI and RFP were issued, and the GREC PPA negotiated.

The City Commission currently has full authority for governance of GRU, with the General Manager Manager for GRU reporting directly to the City Commission. The authority of the General Manager is outlined in the City Charter and the City purchasing policy, which was previously discussed. The City also currently benefits from the input of several subcommittees known as the Gainesville Regional Utilities Committee (GRUC) and the Gainesville Energy Advisory Committee (GEAC). GRUC is made up of three members of the City Commission and an ex-officio member representing Alachua County, with a stated purpose (or primary responsibilities) of reporting back to the full Commission on GRU related matters. In addition, within the City Charter and Ordinances, GEAC has been created to advise the City Commission on matters related to GRU and City energy needs for the future.

The GEAC is comprised of of nine (9) members (appointed), with each member serving staggered three year terms. The goal of the GEAC, to the fullest extent possible, is to include members who are broadly representative of the community interests. The GEAC's primary responsibilities are to:

 "Serve as a channel of communications between the Commission, utility staff, and the citizens of the City in order to understand and solve the complex problems relation to energy;

- Promote public access to information on City facilities, services, policies and programs concerning energy, and consider the future energy needs of the community with respect to the Utility, as well as general government;
- Assist utility staff by suggesting and reviewing policies affecting programs and services that affect acquisition, delivery, or utilization of energy resources within the community; and
- Perform any other duties which may be within the purview of the committee which may be assigned by the commission."<sup>232</sup>

There are other committees that are involved in Gainesville governance. One such Committee is the Alachua Environmental Protection Advisory Committee that advises the City Commission on environmental matters. It is through this committee, that environmental concerns were first raised about GRU's plans in the 2003 through 2006 period to build additional coal generation capabilities, and through these discussions, the consideration of the use of biomass fuel resources emerged.

In addition, at the end of last year, GRU requested that the City Commission establish a Rate Advisory Board. This was referred to the GRUC in November 2014 and has not been addressed as yet by the GRUC or the full City Commission. Components of the Rate Advisory Board are provided below.<sup>233</sup> The composition of the Board would be comprised of seven members appointed by the City Commission, each of whom would serve three-year terms. Board members should have expertise or demonstrated leadership in one or more of the following areas: accounting/finance, construction management, engineering, law, or executive business management. Members should be customers of Gainesville Regional Utilities and should include:

Residential Customers

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- o 2 residential customers living inside the Gainesville city limits
- o 1 residential customer living outside the city limits
- General Service Customers to include one General Service Demand and one General Service non-demand
  - o 1 General Service Customer from inside the Gainesville city limits
  - o 1 General Service Customer from outside the city limits
- Large Power Customers no geographic designation allows for future inside/outside balance
  - o 1 Electric Large Power Service Customer
- Multi-family Customers (50 units minimum) no geographic designation allows for future inside/outside balance
  - o 1 Multiple-Family Water Customer

<sup>&</sup>lt;sup>232</sup> Section 2-359 of the Code of Ordinances

<sup>233</sup> RUC Item #140461

The purpose and intent of the City Commission is to establish the Board to serve as an advisory body providing advice and recommendations to the Mayor and City Commission on the city's retail utility service rates. The Board shall, in its investigation, deliberation and advice, strive to advise the City Commission on:

- Review and comment on proposals made by the department for changes to the utility service rates.
- Develop and provide recommendations to the Mayor and City Commission on issues relevant to the setting of the utility service rates, provided that the Board shall have no authority to review or revise the utility service levels.
- Act as a liaison to encourage community understanding of, and participation in, the utility service rate setting process.

The Rate Advisory Board would hold public rate hearings on proposals made by GRU to change the utility retail service rates or establish new utility service rates for property-related services furnished by the utilities, excluding taxes and surcharges, and upon conclusion of the hearing, provide recommendations to the mayor and City Commission on such proposals.

Despite the existence of all these current or proposed committees involved in providing input and governance, various questions and concerns continue to be raised regarding the governance model in place to provide oversight to GRU. The concerns expressed often raise questions regarding the broad-range of technical competencies required to evaluate and assess complex challenges and strategic decisions, and whether current governing models can adequately assure that a utility is meeting those challenges. With growing budgetary and regulatory restrictions, resource supply concerns, volatile fuel prices, and mounting pressure to adopt greater energy conservation and environmental sensitivity efforts, the provision of utility services is more problematic and entails greater risk...all with the need to ensure that customers have access to safe, reliable and affordable services.

Two current proposals recommend altering the City Commission's governance structure over GRU to either:

- An appointed utility authority to be called the Gainesville Regional Utility Authority (GRUA) (Proposed by the Gainesville Area Chamber of Commerce); or
- A separate, and fully independent, legal entity with governing authority over GRU to be called the Gainesville Regional Utilities Commission (proposed amendment to the City of Gainesville Charter by Representative W. Keith Perry of the Florida Legislature). <sup>234, 235</sup>

These proposals are further discussed below.

<sup>&</sup>lt;sup>234</sup> A Gainesville Solution, The Energy Competitiveness Report, November 2013, prepared by the Gainesville Area Chamber of Commerce

<sup>&</sup>lt;sup>235</sup> Bill No. HB 1325, Florida Legislature, Article VII Gainesville Regional Utilities Commission, 2015

While the governance structure of GRU is currently in question, the same holds for many other public utilities as they look to find better ways to address the complexities of operating in today's utility industry, and under the increasingly watchful eye of accountability. Both Colorado Springs Utilities ("CSU") and Austin Energy, other municipally owned utilities to which GRU is often compared, are facing similar efforts to evaluate their current governance structures. The City of Colorado Springs, Colorado recently initiated a community review process to discuss the best governance model and future of CSU, while the City of Austin, Texas has been evaluating calls for it to allow an independent board to provide oversight to Austin Energy.

There are various governance models in place for municipal utilities, but they typically fall into one of three broad categories 1) utilities governed by a city council or commission, 2) utilities governed by an independent board appointed by the city council or commission, and 3) utilities governed by an independent board that are elected to their positions. In addition, utilities governed by a city commission also fall into two broad categories with those where a) the utility services are provided by a department under the City Manager, or b) the utility services are quasi-separate entities that report directly to the City Commission (as is the case with GRU).

In a survey conducted of municipal utilities in 2010, the APPA observed that the type of primary governing body in use by a utility was largely influenced by its size (i.e., the number of customers). The results of its survey of over 658 respondents is shown in the table below.<sup>236</sup> With regard to utilities with greater than 50,000 customers, as with GRU, the majority (~68%) were governed by some form of independent board (either elected or appointed), the vast majority of which possessed the authority to set retail electric rates, approve utility budgets, make financial investments for the utility and approve purchased power contracts, among others (with the exception primarily being the authority to issue long-term bonds).

Type of Primary Governing Body							
	Number of	Independen					
Customer Size Class	Responses	Elected	Appointed	City Council			
Less than 5,000 Customers	408	5%	23%	72%			
5,000 to 20,000 Customers	161	20%	40%	40%			
20,000 to 50,000 Customers	55	33%	34%	33%			
Greater than 50,000 Customers	34	24%	44%	32%			
TOTAL	658	12%	29%	59%			

A survey also conducted around the same time with a focus on Florida public utilities, similarly observed that larger municipal utilities tended to be semi-autonomous either reporting directly to the City Commission, or to an independent board elected or appointed by the City Commission.<sup>237</sup>

<sup>&</sup>lt;sup>236</sup> 2010 Governance Survey, American Public Power Association (APPA), published August 2010

<sup>&</sup>lt;sup>237</sup> Managing Public Utilities: The American Way, Nuno Ferreira da Cruz, Sanford V. Berg, Rui Cunha Marques

In addition, as capital investment and requirements expand to replace aging assets, as well as adopt new technologies, capital markets and their rating criteria and guidelines play an even more important role in how a utility is being governed and managed. The quality of a utility's senior management and its governing body are key considerations in the analytical process engaged by public market ratings agencies to evaluate the credit quality of public power issuers. Moody's Investor Services cites it belief that:

"...strong independent boards with industry expertise as a condition of service on the board membership are the soundest governance structure" and, that they "generally look for governing boards that minimize political interference in the professional management of the utility operations and establish sound rate policies, risk management programs, strategic plans and general fund transfer policies."<sup>238</sup>

There are various options available to the City for consideration, including the following:

#### Maintain the Current State

The pros of maintaining the current state is that the City Commission maintains direct control of the GRU agenda and provides guidance for strategic objectives, policies, and issues of concern to citizens and the utility. However, to provide Alachua County and customer input from those who reside or maintain a business outside the territorial boundaries of the City, existing and / or proposed advisory committees could still be useful in meeting those needs.

The management of a multi-utility operation such as GRU is a complex and time-consuming effort, and providing oversight can be just as challenging. The City Commission has recognized this issue by already consolidating GRU issues into one session a month, at which time the relevant issues are addressed.

The cons for continuing the current state include the following:

- Continued concern of the potential for politics to creep into the operations of GRU
- Continued use of disconnected committees to address issues of concern
- The time required to fully address issues of any complexity
- Gaps in utility knowledge, level of interest, areas of expertise, and geographic representation still exist
- Unresponsive to a growing level of concern with governance, transparency, and representation expressed within the community.

While maintaining the current state for some transition period may be appropriate, Navigant believes that some change is required to address specific shortcomings and respond to expectations within the community.

<sup>&</sup>lt;sup>238</sup> Moody's U.S. Public Finance Rating Methodology, U.S. Public Power Electric Utilities, 2008

#### Create an Independent Board (Elected or Appointed)

In recent sessions of the Florida Legislature, a bill was submitted and re-submitted to Committee to create an independent board to provide oversight of GRU, severing this responsibility from the City Commission, except as it relates to the issuance of bonds and approving rates. This option has also been proposed by the Gainesville Area Chamber of Commerce and has been addressed through the introduction of a new bill in the Florida legislature by Representative Keith Perry calling for a referendum on an amendment to the City's Charter to provide for an independent (member-appointed) board form of governance model.

The pros for such a change would obviously be to provide some independence from City and regional political and financial issues, and address some of the issues concerning representation of all interests within the region.

Establishing an independent board is difficult to achieve while providing no guarantee that oversight can be improved unless some of the key criteria listed previously can be addressed. In all likelihood, creation of an independent board would require a change in the City Charter, might require legislation ; and potentially may require considerations related to bond covenants and of other issues, as well as an impact on the authority of the City Commission to maintain its control and ownership over issues of such great concern to the City of Gainesville.

#### Use of an Advisory Committee

In order to maintain control of the oversight of their municipal utilities, many municipally owned utilities often use an advisory committee made up of its constituents to do the heavy lifting of addressing the issues of their utility. Rather than create an independent board, these cities use an advisory committee to review the status of the utility, represent the ratepayers' interests, and represent the City Council or Commission in addressing the strategic, operational and financial aspects of the utility. These advisory councils typically meet at least monthly, review the agenda or issues that will be submitted to the Council or Commission for that month, and provide recommendations to the Council or Commission for consideration or action. Some characteristics of these types of committees include the following:

- Number of members ranges from seven to eleven
- Members are customers of the utility
- Members are appointed either by the Council, or in some cases, the mayor, or in other cases by the departing members themselves (self-perpetuating)
- These positions are not elected
- Members represent the make-up of the community (residential, commercial, industrial, government and/or public authorities)
- Terms of appointment range from two to five years with longer terms being preferable to retain a continuation of the knowledge gained by the board in dealing with utility related issues
- In some cases, qualifications are required for appointment (technical, financial, organizational, etc.)
- The scope of review of the committee is comprehensive, not limited

 In most cases, there is no compensation for participation in an advisory committee or board.

Based on the 2010 American Public Power Association (APPA) governance survey included in the Chamber of Commerce's report from November 2013, approximately 32% of municipal utilities with over 50,000 customers are managed by a City Council or Commission, with the remaining 68% being either an elected or appointed independent board. In addition, for same-sized utilities, respondents indicated that 38% used an advisory board. Navigant has worked on a number of issues for Austin Energy (with whom Navigant is very familiar) who is governed reasonably effectively through an Electric Utility Commission that advises the City Council on utility issues.

While the recommendations submitted by the Gainesville Area Chamber of Commerce in its 2013 report are good recommendations, there is some concern with the level of costs and effort that may be required to appoint an independent regional utility authority.

Navigant would suggest that it may be more practical to reconstitute the existing GEAC to serve as a utility advisory board, using many of the characteristics provided above. By taking this approach, the Commission might be able to more quickly establish a qualified and effective advisory board that can focus its time on the issues of greatest importance to the City Commission, be able to become better informed as to the complexity of GRU's operations, and provide an avenue for citizen input into the decision process, while allowing the City Commission to retain its full rights as the governing body of GRU.

There are pros and cons for each of the above mentioned structures, but in most cases where an independent board has been created, there were specific circumstances that led to its creation including initial statutory law that created the board, specific provisions within bond covenants, or some upheaval that led to the need to separate politics from the operations of a utility. However, no matter the governance structure selected, there are several key factors that lead to a successfully managed utility. Those factors, at a minimum, include:

- Clear goals and objectives established by the governing body
- Strong leadership and management of the utility by the general manager
- A means for monitoring key performance indicators related to operations, customer satisfaction and financial considerations
- Clear communications between the general manager, the governing body and other stakeholders including customers
  - o Related to reliability
  - Related to customer service
  - Related to rates

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When these specific factors are successfully addressed, utilities effectively meet the needs of their stakeholders, and contribute to the success of the community for which they provide service.

8. Florida Sunshine Law Provisions can Inhibit Contract Negotiations

The City Commission is subject to Florida Sunshine Law Provisions, and while not applicable to private entities such as GREC, creates the challenge of keeping certain proprietary information of any private company confidential during contract negotiations. The Florida Sunshine Law applies to any board or commission of any state agency or authority and any agency and authority of any county, municipality or political subdivision. The basic requirements include:

- Meetings of the boards and commissions must be open to the public
- Reasonable notice of such meetings must be given, and
- Minutes or the meetings may be taken and promptly recorded.

The existence of open records requirements for most public power entities in other states is fairly common, but the interpretation and application of those laws in other states is not nearly as open as those requirements that apply to municipal entities in Florida. The City Commission is clearly subject to such open records laws, including providing details of any contracts such as the PPA. Any subcommittee created by the City Commission is also subject to those same open records laws if they are in created in an advisory role, or are delegated with decision making authority. There are some exceptions to that requirement that include fact-finding committees, staff committees, attorney-client meetings, etc.

Conversely, private entities or companies doing business with a public agency are not subject to the Florida Sunshine Law, unless they were specifically created for the purpose of, or tasked with performing "public duties" on behalf of the public entity.

The rather broad application of the Florida Sunshine Law may have been a major contributor to the lack of information and communication to the City Commission from the GRU General Manager concerning the terms of the contract under negotiation. GREC, as a private entity had the right to expect that certain information that it considers proprietary be held in confidence by GRU during those contract negotiations. Any release of that information during the negotiation phase may have adversely impacted the ability of GRU to negotiate a final contract.

The existence of the Sunshine Law and its interpretation is problematic for GRU and is not something that many other public power entities in other states are required to deal with. As an example, in states where there are competitive wholesale and retail electric markets (e.g. in Texas), there are a number of matters that are typically allowed to be excluded from the public domain and are referred to as "proprietary and competitive matters." The disclosure of this type of information may put the electric operating utility at a distinct operating or negotiating disadvantage if the particulars of any transaction, contract or operating parameter are made public. These matters are allowed to be discussed among commission or council members in executive session and can apply to a number of other types of issues including personnel matters and legal matters. It is typically determined that these types of issues are discussed in closed "executive sessions" to allow the governing board to have the opportunity to have a full, complete and shared understanding of the issues at hand to support an open discussion among the decision makers and contributes to typically improved decision making.

9. GRU did not have an Effective Change Control Process

A *Change Control Operating Procedure* is to ensure effective management of changes to the organization, business requirements, schedule and costs that have previously been approved (i.e., to "manage and control the recording, assessment, approval…of changes").

The change control process was hindered by a number of factors, but principally by GRU's lack of a detailed impact assessment and validation process. Impact assessments typically are structured to provide necessary information for evaluating the potential impact of a proposed change on an existing process, project or contract. However, GRU does not appear to have a formal change control process.

The complexities of assessing the potential impact from a specific change without significant evaluation, vendor input, and analysis, all of which take time, often lead to assessments that are understated as to any particular impact on a project or contract, as in the case of the Equitable Adjustment to the GREC PPA. In fairness, often individuals do not have a reasonable means of assessing the impact of an individual change, much less the cumulative impact of numerous changes, without outside expertise or assistance.

Unfortunately, rather than providing more and better information on the potential impacts of proposed changes, the pressure to avoid public scrutiny and/or debate resulted in limited to no impact assessment and discussion until well after the Equitable Adjustment had been executed.